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# Child and Adolescent Services in General Hospitals

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REPORT OF THE SUB-COMMITTEE
ON SPECIAL SERVICES IN HOSPITALS

GUIDELINES FOR ESTABLISHING STANDARDS
FOR SPECIAL SERVICES IN HOSPITALS

# CHILD AND ADOLESCENT SERVICES IN GENERAL HOSPITALS

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Health Services and Promotion Branch

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## IMPORTANT

The information contained in these Guidelines was current at the time of publication. When using the Guidelines it should be remembered that certain aspects of the delivery of health care and health technology are changing rapidly. Should you identify any out-of-date material in the text, please inform:

Mr. D.F. Moffatt,
Director, Institutional and Professional Services Division,
Health Services Directorate,
Health Services and Promotion Branch,
Department of National Health and Welfare,
Ottawa, Ontario
K1A 1B4

Further copies of these Guidelines in both official languages can be obtained from the above person.

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# GENERAL INTRODUCTION

## Background

Advances in health technology and changes in the planning and delivery of health care have contributed to an increasing demand for specialized services in hospitals. A dramatic rise in the number of intensive and specialized care facilities and services in hospitals has occurred in recent decades due to rapid technological development in electronics and automation, and as a result of new approaches to patient care. These changes have produced demands for physical facilities, specialized equipment and highly-trained health manpower. Because of this, there is a continuing need for guidelines for standards to assist those involved in planning, organizing and operating special care services in hospitals.

## Mandate

In 1972 health authorities in Canada recognized the need for guidance in this area, and the Federal-Provincial Advisory Committee on Health Insurance commissioned the Working Group on Special Services in Hospitals to create Guidelines for standards to provide a reliable definition of requirements for a number of special care facilities and services.

Guidelines were developed by the Working Group for 14 units and services, and, in 1975, these were published under the title, "Guidelines for Special Care Units in Hospitals". This volume was widely distributed to provincial health and hospital authorities, and to national and international health organizations, and has been adopted by many as a guide.

The continuing development of existing and new health technologies, together with changes occurring in the pattern of health care delivery, gave impetus to the updating of the 1975 Guidelines, and to the development of Guidelines in additional areas. In May 1982, The Federal-Provincial Advisory Committee on Institutional and Medical Services granted the Working Group continuing status as a sub-committee of the Advisory Committee. The name of the Working

Group was therefore changed to the Sub-Committee on Special Services in Hospitals. A complete list of Guidelines published or being prepared by the Sub-Committee is found in Appendix IV.

**Methodology**

The Guidelines published in 1975 were developed on the principle of a consensus of information, knowledge, experience and expert opinion obtained from appropriate organizations and individuals throughout Canada. They were based, where possible, on Guidelines developed in Canada, and from authoritative sources in other countries. This approach has been generally acceptable to government and hospital authorities and the health professions.

The present Guidelines were prepared on a similar basis. On this occasion, in addition to input from provincial authorities, the expert opinion of health professionals was obtained through formally designated representatives of national health organizations representing the activities involved in each specific service. It is certain that many hundreds of health professionals from every area of the country have provided expert input in these Guidelines by this method, and have thus provided a truly Canadian consensus on these topics.

**Suggested purpose of the Guidelines**

The Guidelines should not be regarded as rigid standards. Their application may vary throughout Canada, and it is the prerogative of each province to accept, modify or reject the Guidelines according to provincial priorities.

The purpose of the Guidelines is to provide a definition of requirements for a number of special care facilities and services. They are not intended to provide standards for clinical practice.

Where development of a unit is under consideration, the Guidelines will assist planners and government health authorities in determining the need for such a unit, and in assessing the total potential impact of a new unit on existing and projected services, both at the local and regional

levels. Deficiencies in existing services can be identified, and in some cases these can be corrected without the need to develop a new unit.

Where a unit already exists in a hospital, the Guidelines will help to identify problem areas related to administration, personnel, equipment, and physical facilities. They will help to determine necessary remedial action and to set priorities for corrective measures on the basis of clinical need, fiscal realities, and the degree to which a deficiency in the physical facilities impedes adequate functioning of the unit.

**Future revisions**

Because of the rapidly changing nature of health care, the Guidelines will require regular revision. It is planned to maintain the Sub-Committee to carry out this function.

**Acknowledgments**

The Sub-Committee acknowledges with sincere appreciation the immense amount of work undertaken and time given by practising health professionals in Canada in providing detailed written information and guidance in the preparation of these Guidelines. In addition, we wish to thank the Canadian Institute of Child Health for initiating the development of these Guidelines and also the many others who, in any way, contributed advice and information to this endeavour.

## LIST OF PARTICIPANTS

The membership of the Sub-Committee on Special Services in Hospitals, responsible for the preparation of the new and updated Guidelines is as follows:

Mr. Donald F. Moffatt (Chairman)
Director
Institutional and Professional Services Division
Health Services Directorate
Health Services and Promotion Branch
Department of National Health and Welfare
OTTAWA, Ontario

Mr. Derek J. Beckley
Director
Program Planning Branch
Hospital Services
Alberta Hospitals and
Medical Care
EDMONTON, Alberta

Mme Madeleine L. Côté
Chief, Institutional Health Services Section
Institutional and Professional Services Division
Health Services Directorate
Health Services and Promotion Branch
Department of National Health and Welfare
OTTAWA, Ontario

Dr Maurice Héon
Professeur et directeur
Département de Neurochirurgie de la
Faculté de médecine de Sherbrooke
Centre Hospitalier de l'Université
de Sherbrooke
SHERBROOKE (Québec)

Dr. Gordon A. Judge
Medical Director
The Toronto Western Hospital
TORONTO, Ontario

Mrs. Phyllis MacDonald
Standards Officer
Urban Health Facilities Division
Manitoba Health Services Commission
WINNIPEG, Manitoba

Mr. David L. Martin
Consultant in Health Administration
Institutional and Professional Services Division
Health Services Directorate
Health Services and Promotion Branch
Department of National Health and Welfare
OTTAWA, Ontario

Dr. Hans H. Rubarth
Regional Director
Health Care Institutions Division
Nova Scotia Department of Health
HALIFAX, Nova Scotia

Dr. Robert Seaver
Senior Medical Consultant
Personal Health Division
Program Advisory Branch
Ministry of Health
TORONTO, Ontario

SECRETARIAT

Mrs. Janet Stow
Projects Officer
Institutional and Professional Services Division
Health Services Directorate
Health Services and Promotion Branch
Department of National Health and Welfare
OTTAWA, Ontario

The Guidelines on Child and Adolescent Services in General Hospitals were prepared for the Sub-Committee on Special Services in Hospitals by the following Working Group.

**WORKING-GROUP ON CHILD AND ADOLESCENT SERVICES IN GENERAL HOSPITALS**

Mr. Donald F. Moffatt, Chairman
Director,
Institutional and Professional
Services Division,
Health Services Directorate,
Health Services and
Promotion Branch,
Department of National
Health and Welfare,
OTTAWA, Ontario.

Mr. Derek J. Beckley,
Director, Program Planning Branch,
Hospital Services,
Alberta Hospitals & Medical Care,
EDMONTON, Alberta.

Mrs. Elizabeth Crocker,
Director, Child Life Program,
Izaak Walton Killam Hospital for
Children,
HALIFAX, Nova Scotia.

Dr. F.W. DuVal,
Medical Arts Bldg. *1502
233 Kennedy Street,
WINNIPEG, Manitoba.

Dr. Peter Kelly,
Family Physician,
6622 - 20A Street S.E.,
CALGARY, Alberta.

Dr. R.H. Lennox,
Senior Medical Consultant
Health Services Directorate,
Health Services & Promotion Br.,
Health and Welfare Canada,
OTTAWA, Ontario.

Miss Marie Lund,
Assistant Administrator,
The Hospital for Sick Children,
TORONTO, Ontario.

Dr. R. Glen Macdonald,
Chief of Pediatrics,
Department of Pediatrics,
Saint John Regional Hospital,
SAINT JOHN, N.B.

Dr. Roderick MacLeod,
Head, Youth Services in Psychiatry,
Department of Psychiatry,
University Hospital,
SASKATOON, Saskatchewan.

Miss Mary Elizabeth McKenzie,
Clinical Nursing Head,
St. Boniface General Hospital,
WINNIPEG, Manitoba.

Dr. J.H. Murray,
Associate Executive Director,
Canadian Council on Hospital
Accreditation,
OTTAWA, Ontario.

Mrs. Susan Okuda,
Chief Medical Social Worker,
Royal Columbian Hospital,
NEW WESTMINSTER, B.C.

Mrs. Shirley Post,
Executive Director,
Canadian Institute of
Child Health,
OTTAWA, Ontario.

Dr. G.C. Robinson,
Professor and Head,
Division of Population Pediatric,
Department of Pediatrics,
University of British Columbia,
VANCOUVER, B.C.

Mrs. Janet Stow,
Project Officer,
Health Services Directorate,
Health Services and Promotion
Branch,
Department of National
Health and Welfare,
OTTAWA, Ontario.

# CHILD AND ADOLESCENT SERVICES IN GENERAL HOSPITALS

## PREAMBLE

The health care of children raises some unique concerns and considerations. Illness and hospitalization can constitute a crisis in the life of a child and the child's family. In hospital a child is exposed to many persons, the environment is new and complex, family life and peer relationships are interrupted, routines are unfamiliar and often frightening, and the child experiences a loss of independence. Hospitals must be aware of these stresses and should devise programs and approaches that will not only attend to medical and surgical needs, but will reduce the potential trauma associated with hospitalization and provide opportunities for children to continue their growth and development.

The hospital is an important resource in the range of health services for children. The Guidelines recognize the responsibility of hospitals to provide for the particular needs of children, adolescents and their families and to promote participation of the family in the various aspects of hospital services.

These Guidelines are intended to assist hospitals and related health agencies in planning, implementing and evaluating the care of children and their families. The intended audience is the general hospital, although many of the principles apply to any health care facility providing services to children.

It is recognized that for some hospitals, the attainment of the services identified is a goal to be worked toward. It is hoped that the Guidelines will increase the cost effectiveness and enhance the quality of pediatric care.

### Basic tenets

1. The child and youth population addressed ranges from birth through adolescence. Within this population are several sub-groups, e.g. neonatal, infant, preschool, school age and adolescent. Implications for these groups are addressed in the Guidelines.

2. The child must always be considered in the context of a developmental framework. Programs and policies must be geared to different age groups.

3. The "patient" is the child-family unit and good care must provide for the needs of the entire unit.

4. The concept of family-centred care is fundamental. It recognizes the importance of maintaining family relationships and the adverse effect of separation. When "family" is not available, substitute services are essential.

5. Within the hospital itself, all children should be served in the pediatric unit. It is recognized that in certain small community hospitals, this may not be practical. However, the individual nature of the pediatric patient should be respected, and age appropriate services and supports should be available for children and their families no matter where they are located in the hospital.

6. Hospital staff who have contact with children require special training in working with children and their families.

7. The general hospital is often the base from which direct and indirect pediatric services are offered to the community.

8. Effective and continuous care can only be assured by having linkage and co-ordination between hospital and community programs.

**The changing role of the hospital**

The changing pattern of disability in childhood affects the function of the modern hospital serving children.

The traditional hospital role in pediatric care has always been to treat the acute and chronic illnesses of childhood. Advances in the control of nutrition-related

diseases and of the majority of acute and chronic infections of childhood mean that today the major problems of child mortality and morbidity are:

- developmental handicaps of genetic, prenatal or perinatal cause;
- chronic disease management, e.g. cystic fibrosis, leukemia;
- behavioural problems associated with stress of modern society;
- accidental and intended trauma.

These problems require a revision of the traditional role of the hospital pediatric department. In contrast to the episodic nature of many of the diseases of the past, the new morbidity has a longer term impact, necessitating expanded ambulatory services and linkages between hospital and community services to ensure effective continuity of care. Accordingly, the inpatient diagnostic groups (Table III, page 93) do not fully reflect the profile of disease in the child population.

Coincidental with these changes there have been a number of other societal developments which have had an important impact on health services. These include national health insurance; concern for the rights of culturally and economically disparate groups; rising consumer expectations in terms of care; changes in family structure, such as single parent families and working parents; emergence of a wide range of allied health professionals and increasing health costs. The combination of all these factors has had a profound effect on the role of the hospital in the community.

**Implications for hospitals**

The changing pattern of disability in childhood and the emerging priorities in the delivery of health care have important implications for hospitals offering services to children:

- Hospital policies should ensure social, organizational and environmental design to create an atmosphere which will facilitate the implementation of the following principles.

- Alternatives to traditional inpatient admission for children must be developed, including day medicine, day surgery hostel units, and modified care programs such as home care services and outpatient services. They may be hospital or community-based but must have a well-defined liaison structure to ensure continuity of care. Such programs have medical, psychological and economic advantages.

- Provision must be made for the developmental and psychological needs of children. Since the child is part of a family, care must recognize and support maintenance of family function. This should include family participation in care; open visiting for parents; encouraging visiting for siblings, family and friends; child life programs and preparation programs, both for elective admission and for specific hospital experiences.

- A range of allied health professionals should be available to meet the full range of patients' needs.

- Children and adolescents will usually be best served by accommodation in separate space. Adolescents require their own recreation and lounge space. Special arrangements should be made for children and adolescents who cannot be admitted to the pediatric unit because special care needs require placement elsewhere such as in a burn unit, intensive care unit or neuro-surgical unit. These patients should still have the overall support of the pediatric department in order to ensure that they receive age-appropriate services.

- Parental needs must be recognized. This recognition would include flexible scheduling of appointments, parental need for information about their child's specific health problem, appropriate waiting areas and food services. This would especially apply to parents of children who need repeated services. Support systems should be offered for needed respite to families whose children have chronic diseases or handicaps.

- Provision or support should be given to teaching programs that will help families, patients and the community to cope effectively with specific health problems.

- In all general hospitals, there should be staff training programs for all staff in contact with children and adolescents. The programs must be related to child development and age-related needs. All direct service departments, such as radiology services and laboratory services, and all patient care areas should give special consideration to meeting the needs of children and adolescents in delivering their services.

- Since the admission of a child to hospital is seen as the least preferred option in most cases, it will be incumbent upon hospital staff associated with the pediatric services to:

  advise on alternative treatment methods;

  provide consultation services within the hospital and in conjunction with appropriate community agencies, to the community by any members of the pediatric team;

  foster the use of outpatient and community treatment resources and promote the development of home and community-based programs;

  review, by means of audit and utilization committees, the incidence of hospitalization of children and the quality of service for different medical and surgical conditions and be actively involved in decreasing average lengths of stay and developing outpatient services;

  facilitate and encourage community-based health professionals to follow the course of their pediatric patients in hospital, recognizing that they will usually have greater knowledge of the family's environment, strengths, and weaknesses and that continuing care will occur in the community.

## The Process of Change

Hospital and related health agency personnel who read these Guidelines may identify a number of areas where changes in structure, organization, staffing or policy may be desirable, but change is not easy to introduce in any organization, let alone in a complex organization such as a hospital. There may be problems for staff who must carry out new policies; physicians and nurses may find it difficult to accept parents and other professionals participating in the care of children on the unit. Parents, too, may be unsure of what is expected of them in terms of caring for their children in the hospital setting. The challenge is to blend together the special contributions of families, professional staff, and volunteers; to address the social and emotional needs of patients as well as their medical and surgical needs.

## GUIDELINES

# I PLANNING AND ORGANIZATION OF CHILD AND ADOLESCENT SERVICES IN GENERAL HOSPITALS

## 1. REGIONAL PLANNING

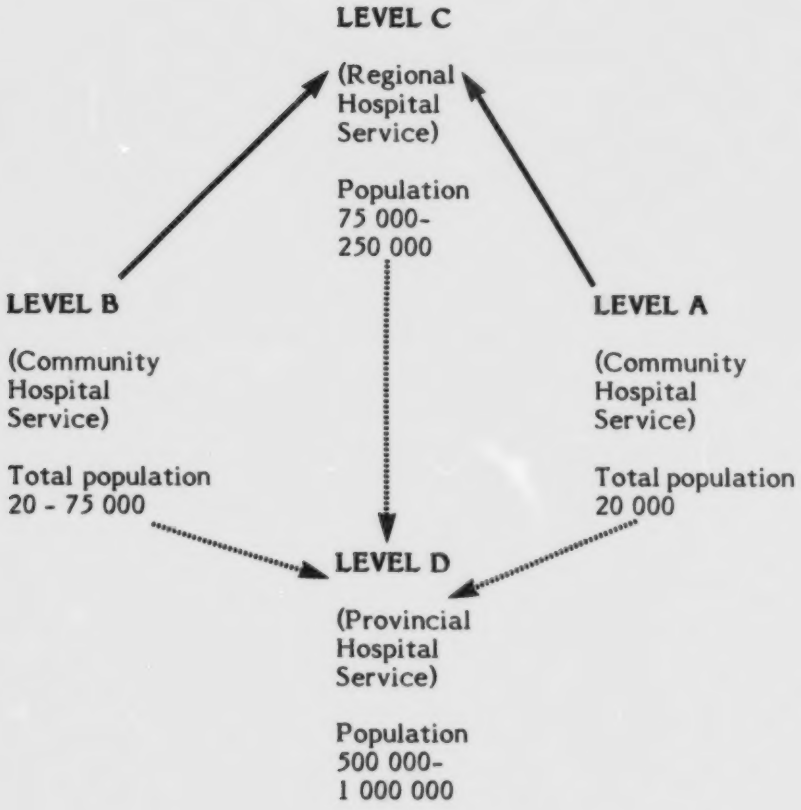
The concept of regionalization of child health care is designed to provide health care services on a geographical basis. Such a concept may cover both hospital care (including acute and long-term hospitals) and community care (including private practice, infant preschool programs, school and mental health programs), although it is more common for these to be organized separately. A regional plan identifies the special needs of children, adolescents, and their families, related to demographic, cultural and geographic (urban and rural) considerations. Services and facilities are then developed to serve the specific geographical area.

The distribution of pediatric units in general hospitals in a geographical area is an important planning problem, particularly with the high cost of hospital care, the many new technological advances, the decline in occupancy rates in many pediatric units and the changing role of the hospital in the network of community child health services. A variety of planning responses may be required to maintain or develop an effective and efficient network of pediatric services. These may include the closing of some pediatric inpatient units to eliminate unnecessary beds; the selection of one hospital for maternity and neonatal care; the sharing of services and location of specialty services such as oncology and genetic counselling in one hospital, rather than in each hospital in a community.

The key to successful regional planning is the presence of a strong planning and liaison structure which will monitor regional needs and recommend the most appropriate distribution of pediatric care resources.

## FIGURE I

## REGIONALIZATION OF HOSPITAL SERVICES




→ Community hospitals' main consultative pathways are to regional hospitals.

⇢ Community and regional hospitals' consultative pathways are to provincial hospitals when using very specialized services.

## 2. CLASSIFICATION OF LEVELS OF HOSPITAL SERVICES

The sophistication of resources required to provide the range of contemporary hospital functions necessitates the development of levels of hospital service. They can be grouped into community service, regional service and provincial service,[1] and the interrelationships between the three levels of service within a region are shown in Figure 1. The definitions of the different levels are arbitrary and may apply to one province and not to another. Familiarity with and utilization of appropriate regional resources will enhance both the effectiveness (as judged by compliance with a plan of management) and efficiency (as judged by earlier discharge and reduced cost) of care. Similarly, the sharing of health records between hospitals and community physicians and agencies will encourage the coordination and the continuity of care. Early discharge, with appropriate documentation, to the referring hospital will greatly enhance the opportunity for the child to be with the family.

**Level A** - Community Hospital Service

This level would apply to small and medium-sized communities (up to total population of 20 000 in semi-rural and sparsely populated areas that are frequently 60 minutes or more from a larger facility)

At this level:

- workloads are small and will vary with the age distribution of the population.

---

1. The use of the terms primary, secondary and tertiary care hospitals was considered but was felt to be less useful than the above grouping. More than one level of care is provided to the consumer in the hospital and these terms are perhaps better confined to the professional providing the care rather than to the hospital in which the care is delivered.

- services are essentially inpatient although increasingly ambulatory services may develop. In some rural communities physicians conduct their practices from hospital-based offices. Other health services to the community such as laboratory, radiology, psychiatry, dentistry, visiting consultants and physiotherapy, may be based in the hospital.

- the hospital staff participate in community support services, either at the hospital or in the community. This could be consultation/liaison to community professionals, such as the school nurses, who provide direct services to children or families; or to community programs such as Infant Development Programs, outreach services for children with developmental handicaps, child abuse services and home support services such as homemakers.

- preventive services such as neonatal screening programs (P.K.U. and hypothyroidism), hospital tours for young children, and health education activities in collaboration with schools and with parent groups are offered.

- educational programs are present to encourage professional education of the hospital staff and to provide learning opportunities for students of all kinds from adjacent schools of nursing, colleges and universities; to participate in community education programs in the field of health care, and to publicize the availability of preventive and treatment services.

- complex problems are referred out for assessment and management. (See Sections 1.2 Medical Services and 1.3 Surgical and Anaesthetic Services, pp. 47-49)

**Level B** - Community Hospital Service

This level will usually serve larger communities (20 000 - 75 000 total population)

At this level:

- some hospitals will be situated in relatively isolated communities, while others will be situated in communities close to other towns and cities.

- the workload and care functions will depend on the medical manpower and the specialty referral services available.

- similar inpatient and ambulatory services as noted in Level A will be present. There is also scope for the development of assessment and management services for the common developmental problems such as delayed development; speech and hearing problems and behaviour problems; chronic diseases such as asthma and diabetes mellitus, and other programs, for example, adolescent gynecology and rehabilitation. The development of these programs will depend upon existing services in other community settings.

- perinatal intensive care services - Type A (Level 1)[1] will be present.

- there will be similar community support, prevention and education services as described in Level A.

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1 See Perinatal Intensive Care Unit, Guidelines for Special Services in Hospitals, 1979, Health Services Directorate, Department of National Health and Welfare.

**Level C** - Regional Hospital Service

This level will usually serve a population of over 150 000, but in some provinces geographic considerations will dictate that some referral hospitals serve a population of 75 000 and above.

At this level:

- the range of medical specialties will usually be available and pediatric consultations should be available 24 hours a day. The number, type and sophistication of other direct care functions, for example physiotherapy, speech therapy, and psychology, will vary within different settings, depending upon the various health professionals being on the hospital staff and upon existing services in other community settings.

- similar inpatient and ambulatory services as described in Levels A and B. There is also scope for the development of assessment and management services for the less common developmental problems such as congenital deafness and visual impairment, and chronic diseases such as fibrocystic disease and myopathies.

- perinatal intensive care services - Type B (Level 2)[1] will be present.

- micro-chemistry - will be available 24 hours daily.

- the same community support, prevention and education functions described in Level A, and additional community support services such as a 24-hour consultation service for physicians and poison control centres will be offered.

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1 See Perinatal Intensive Care Unit, Guidelines for Special Services in Hospitals, 1979, Health Services Directorate, Department of National Health and Welfare.

- pediatric intensive care service - will be present in either a separate unit or in association with an adult unit.[1]

- research will be undertaken to stimulate clinical research and research in health care delivery, for example a model of an innovative program, and to bring the results of the studies to the attention of the provincial ministries of health and to the community at large.

**Level D** - Provincial Hospital Service

This level will usually serve a population of 500 000 - 1 000 000. There may be one or more hospitals in a province providing services at this level.

At this level:

- a hospital would have available services to manage the full range of illnesses and problems of childhood.

- inpatient and ambulatory services described in Level C, together with one or more "one-of-a-kind services" to the entire regional area or to a number of regions will be present. Such services might include renal dialysis, bone marrow transplantation, cardiac catheterization and cardiac surgery.

- perinatal intensive care services - Type C (Level 3)[2] will be offered.

---

1 See Intensive Care Unit, Guidelines for Special Services in Hospitals, 1979, Health Services Directorate, Department of National Health and Welfare.

2 See Perinatal Intensive Care Unit, Guidelines for Special Services in Hospitals, 1979, Health Services Directorate, Department of National Health and Welfare.

- the same preventive and education services described in Levels A, B and C will be present.

- the same research functions described in Level C will be carried out.

## 3. THE NEED FOR PLANNING

### 3.1 Determinants of the Need for Child and Adolescent Services in General Hospitals

The need for hospital pediatric services is determined by a number of indicators that should be reviewed on a regular basis by hospitals and planning authorities.

Population of the Area

The pediatric population estimates should be reviewed, together with the age distribution therein.

It has been predicted that during the decade 1980-1990 the 0-19 year population in Canada will increase and the age distribution of this population will change in the direction of increases in the 0-4 and 5-9 and corresponding decreases in the 10-14 and 15-19 year age groups(19). The degree of change may vary, not only in the provinces and territories, but also within the individual communities.

Special attention should be paid to the cultural and linguistic groups, including native Indians and Inuit and immigrant children in the various provinces.

Prevalence and Types of Illnesses in the Area

Morbidity and mortality data for the population of the community should be examined.

Existing Services in the Community

The presence of pediatric services in a community, including other hospitals with pediatric services, should be surveyed and new services should complement existing services and avoid duplication.

Alternatives to Acute Inpatient Hospital Services

These include medical and surgical ambulatory programs, partial hospitalization and home care programs, and long-stay and rehabilitation programs.

Diagnostic and Treatment Support

The availability of services, manpower and equipment needed to identify and treat physical and mental conditions or their symptoms should be examined.

Service Access

Travel time from the patient's home to the hospital and the availability of transportation services in the area should be examined.

Health Manpower

The number and types of physicians and other health professionnals required for direct patient service should be examined.

## 3.2 Planning for the Future

Inpatient

Bed needs in a given area are calculated from the incidence rate[1] (days per 1000 pediatric population, usually 0-19 years) of the resident pediatric population of the area, the size of the pediatric population in the community, and the occupancy rate. When present bed needs are being assessed the current population is used; when future bed needs are being examined future population estimates, including age composition and location of the population, are utilized.

It is reasonable to assume 80% occupancy in pediatric units over 80 beds and 75% in units over 40 beds, but very much lower rates are common in smaller units.

It is often difficult to maintain the quality of pediatric care in units of small size, particularly in urban areas. Whenever possible, pediatric units of less than 20 beds should be avoided unless geographical circumstances justify the presence of a small unit.

---

1 Assume that for a given community the incidence is 425 days per 1000 0-14 years and the total 0-14 years pediatric population is 30 000, bed needs can be calculated as follows:

1. 425 X 30 = 12 750 days required
2. At 75% occupancy, 365 X 75/100 = 274 days
3. Beds needed per year = 12 750 ÷ 274 = 47 beds

## Ambulatory

With the exception of day surgery, it is difficult to estimate the potential volume of ambulatory services described in the section on Ambulatory Services, pages 14-18.

### i. Emergency service

It is difficult to estimate the demand for emergency services as incidence rates are not available.

### ii. Outpatient service

#### Day medical

The demand for medical outpatient services varies greatly from one hospital to the next, and no reliable estimates of service needs are available.

#### Day surgical[1]

The number of pediatric operative procedures performed on a day basis varies considerably from province to province and hospital to hospital within provinces. About one-third of all pediatric surgery is done in this way in some provinces, and perhaps 50-55% of total surgery is being done on an ambulatory basis in some children's hospitals. It is predicted that there will be an increase in day surgery in the future.

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1 See also, Day Surgery Unit, Guidelines for Special Services in Hospitals, 1982, Health Services Directorate, Department of National Health and Welfare.

Day Psychiatry

The pattern of psychiatric daycare as in the two preceding sections varies greatly. The subject of day psychiatric programs has been addressed in the Guidelines for Child and Adolescent Psychiatric Services.[1]

iii Hostel[2]

Hostels are facilities in which parent and child can be accommodated when the child attends ambulatory clinics or diagnostic and treatment services of a hospital.

For this purpose they are usually located in association with a health facility; however, in some instances they may serve as a halfway house prior to discharge.

iv Home care

Home support services, including home nursing, homemaker services, weekend and holiday relief, are available in some communities for children in need of continuing care. Home care services, designed to prevent admission for conditions such as haemophilia and fibrocystic disease and to promote early discharge, are available in some provinces.

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1 See Child and Adolescent Psychiatric Services in General Hospitals, Guidelines for Special Services in Hospitals, 1979, Health Services Directorate, Department of National Health and Welfare, pp. 21 - 24.

2 See Patient Hostel Unit, Guidelines for Special Services in Hospitals, 1979, Health Services Directorate, Department of National Health and Welfare.

v Outreach Services

Patient care diagnostic and treatment services are often provided to adjacent or remote communities through visiting or telecommunication services.

## II MANAGEMENT OF CHILD AND ADOLESCENT CARE IN GENERAL HOSPITALS

Philosophy, Objectives and Organization

Every child and adolescent service must have a statement of philosophy and objectives which reflects the special needs of children and families. An organization chart for the hospital and for each pediatric service should be available. The provision of pediatric services should follow the basic principles and standards of hospital accreditation in Canada.[1]

### 1. AMBULATORY CARE

#### 1.1 Philosophy and Planning

History

Over the past one to two decades the demand for inpatient pediatric services has declined, while at the same time there has been an increasing demand on hospitals for ambulatory pediatric services. This has been caused by changes in patterns of disease, better preventive and earlier medical care, changing patterns of practice of physicians, and by recognition of the fact that hospitalization can be a traumatic experience for a child.

Planning

The development of the range of ambulatory services has not paralleled that of inpatient services in this country, although it is reasonable to expect that more sophisticated types of service will emerge in the future. It is

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1 Guide to Hospital Accreditation, 1977, Canadian Council on Hospital Accreditation, Toronto, Ontario.

therefore necessary for general hospitals to plan for adequate ambulatory pediatric services. These services should be designed and planned only after the objectives and the functions of the service have been defined. Ambulatory needs will vary from one hospital to another and will depend not only on the size of the hospital, but on other factors such as teaching, clinic services and the availability of community services.

## Location

While the majority of general hospitals use ambulatory facilities for both children and adults, it would be beneficial to both groups if some areas were specifically designated for pediatric use. Crying children and upset parents can often distress the adult patient. By the same token, children can be shocked and frightened by exposure to adult illness and trauma. If there is a sufficient workload consideration should be given to having a separate pediatric ambulatory area. Regardless of the location, it is important that the special needs of children be recognized by the provision of personnel, equipment and waiting areas that are geared to the pediatric patient.

A holding area should be available for short-term observation and treatment of acutely ill children. Provision should be made for the parent(s) to remain with the child. The holding area may be located in the emergency area or in the inpatient unit. Depending on the outcome of the illness, the patient could either be admitted or sent home when his/her condition has improved.

## Child Care Arrangements

There are times when a parent or parents may suddenly be hospitalized without having

the time or the ability to arrange for the care of their child or children. Hospitals should have procedures concerning what to do about arranging for the care of such children.

In the case of childhood emergencies, parents may have to bring healthy siblings along with their ill or injured child. Even for clinic appointments, parents may be unable to find or afford babysitters and so have to bring all their children even though only one is to be seen at the hospital. Because of such possibilities, consideration should be given to having an area with toys available, and staff or volunteers to supervise the activities of healthy siblings who may have to wait in ambulatory care areas of the hospital.

## Staffing Principles

Hospitals providing a full range of emergency and ambulatory care to pediatric patients must have experienced physicians on site and a complement of consultants on call at all times; they also should have a medical Director.

Community service hospitals must have a designated physician on-call either within or out of the hospital on a 24-hour basis.

The full complement of professional services available to inpatients should be available for diagnosis, treatment, education and support of children as appropriate in all ambulatory services.

There should be a sufficient number of support personnel and volunteers to free professional staff so that they may give their full attention to the child and the family in each of the ambulatory care service areas.

Staffing principles for all the major disciplines are outlined in Section III, pages 45 to 70.

## 1.2 Emergency Services[1]

Every hospital with an emergency department should be properly staffed and equipped to deal with pediatric emergencies.

In every community the public must be made aware of where to obtain pediatric emergency care and which accessible hospital is equipped to provide this care.

The definition of an emergency varies from the lay to the medical viewpoint, and it is probably most practical to accept the lay definition of "any condition that in their opinion requires immediate attention". In children this will vary from simple fevers, bruises and abrasions to severe trauma and life-threatening illnesses.

Since parents may be particularly alarmed if their child requires emergency care they may need more explanation, reassurance and attention than relatives of adult patients.

Every emergency department should have known, documented, and readily available policies and procedures for the following situations when dealing with children and adolescents:

- arrangements for transfer to other hospitals when required;
- suspected or known cases of child abuse or neglect (see section 3.4, pages 37-39);
- refusal of parental consent for medical treatment in life-threatening situations;

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1 For comprehensive coverage of emergency services see Emergency Units in Hospitals, Guidelines for Establishing Standards for Special Services in Hospitals, Department of National Health and Welfare, 1981.

- management and follow-up of accidental poisonings and injuries occurring in the home;
- sudden death (e.g. trauma, Sudden Infant Death Syndrome);
- care of children whose parent is suddenly hospitalized via emergency department (See Child Care Arrangements, pages 22-23);
- situations when mandatory consultations with a pediatrician or other specialist should be made;
- public requests for information regarding poisonings, illnesses and injuries.

Community service hospitals should have diagnostic services available in hospital, with technical staff available on-call when their respective departments are closed. Treatment facilities, such as the operating room may or may not be available and will be determinant on the need to transfer to another facility.

### 1.3 Day Medicine and Outpatient Clinics

Outpatient services should use an interdisciplinary approach and may include the following types of centres:

- the traditional medical outpatient clinics such as pediatric assessment clinics and well baby clinics, and arrangement for non-scheduled visits and follow-up of referred patients;
- clinics for the assessment and treatment of children with chronic diseases such as fibrocystic disease of the pancreas, haemophilia, leukaemia and diabetes;
- specialty clinics such as pediatric neurology, developmental assessment and diagnostic clinics;
- an observation centre for the short-term observation and treatment of acutely-ill children;

- diagnostic services, including coordination of appointments for various diagnostic services.

## 1.4 Surgery and Outpatient Clinics

Day Surgery[1]

Day surgery for infants, children and adolescents is a well-established and feasible method of caring for many children's surgical problems.

Examples of the types of surgery undertaken are:

- inguinal and umbilical hernia;
- examinations under anaesthesia;
- muscle imbalance surgery, eye surgery for muscle imbalance;
- placing of tubes in middle ears;
- circumcision;
- excision of skin tumours;
- dental surgery;
- therapeutic abortions.

The child should have a complete physical examination and a medical history appropriate to the procedure should be taken. For the younger child, within one or two days before surgery the child should be examined again to ensure that he/she is fit for surgery. A post-operative examination should also be arranged.

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1 See also Day Surgery Unit, Guidelines for Establishing Standards for Special Services in Hospitals, Department of National Health and Welfare, 1982.

If children are old enough they should be prepared for the hospital visit, (See section on Preparation for Admission, pages 33-34.) Children should also be told of the possibility that they may have to stay in hospital if their condition warrants this.

Following surgery, if the child is taken home by car, it is necessary to have two adults to accompany the child, one to drive and the other to care for the child who may be drowsy or who may vomit.

Outpatient Clinics

Outpatient clinics are required for follow-up and treatment following surgery and assessment of children with conditions that may warrant surgical treatment. The range of services offered could include specialty clinics for follow-up.

### 1.5 Day Psychiatry, Home Care, Hostels, Outreach and Travelling Clinics

See section 3.2 "Planning for the Future", pages 16-19.

## 2. INPATIENT CARE

### 2.1 General

Although the need for inpatient care in general hospitals has declined during the past decade, there remains a significant need for both medical and surgical beds and for isolation and intensive care services.

### 2.2 Special Services

Children requiring the following categories of care should be cared for in Levels C and D which have appropriate special staff, facilities and equipment:

1. Neonatal Intensive Care[1] - very small prematures and neonates requiring assisted respiration, special nursing skills and laboratory determinations.

2. Pediatric Intensive Care[1] - any child needing continuous monitoring of vital or physiologic functions for longer than a few hours.

3. Cardiac catheterization and cardiac surgery[2] and neuro surgery.

4. Treatment of major trauma or severe burns.[3]

5. Total parenteral nutrition or complex intravenous therapy.[4]

6. Complex diagnostic imaging[5] and metabolic/endocrine problems.

7. Acute and chronic renal failure.[6]

8. Treatment of psychiatric illnesses where appropriate management can only be provided in regional and provincial centres.[7]

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For additional information see Guidelines for Special Services in Hospitals in the following areas:

1 Perinatal Intensive Care Unit

2 Cardiovascular Services in Hospitals

3 Burn Unit

4 Total Parenteral Nutrition

5 Nuclear Medicine, Diagnostic Ultrasound, Computed Tomography

6 Regional Renal Failure Program

7 Child and Adolescent Psychiatric Services

## 2.3 Parent Participation and "Living In"

There have been important changes in the environment of pediatric units, the most striking of which are the increased involvement of the family in the care of the child, and programs to support the developmental and psychological needs of children. Family involvement includes unlimited visiting by parents, sibling visiting and parent participation in care. Parent participation may vary from a supportive presence at the bedside to the carrying out of nursing care of the child under the supervision of a nurse. Parents are becoming increasingly aware of their options in this regard and at the time of admission it is important to advise them of the opportunities available to them to look after their child and to stay in the hospital. In this way, a definite plan of parent involvement for each child can be developed between the family and the nursing staff. Assistance and counselling must be made available to parents having difficulties in coping with the unfamiliar situation.

Some specific approaches include:

- 24-hour-a-day visiting;
- parent rooming-in and participating as fully as possible in the care of the child when they wish to;
- care-by-parent unit where the parent continues to take care of the child under direction of nursing staff;
- parent support, where the parent involvement is largely in the form of emotional support.

Parents should be able to participate in care of their child by accompanying the child to various tests and investigations, and by being with the child during induction of anaesthesia, in recovery rooms, and during various ambulatory procedures.

Provision for continued parenting in hospital should include:

- sleeping space;
- consideration of the emotional needs of the parents. A quiet room is needed for distressed parents.

See references 11 and 19 for a more comprehensive coverage of parent participation, and section 2.5, pages 81-82, for additional information concerning space requirements.

## 2.4 Palliative Care[1]

From time to time general hospitals will be required to provide care to a terminally ill child and his/her family. To provide the best possible care various factors must be considered and each hospital must determine how it will best deal with the special problems which the death of a child creates for the family and for the hospital staff who are involved. Terminally ill children have the same general needs as other children at a comparable developmental stage. In addition, the dying child has needs unique to his/her situation which must be understood and dealt with by health care staff. Experience has shown that a combination of in-home care[2] and hospital care is often desirable and that staff who have had the

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1 See Palliative Care Services in General Hospitals. Guidelines for Special Services in Hospitals, Department of National Health and Welfare, 1981.

2 Martinson, Ida Marie, Home Care for the Dying Child; Professional and Family Perspectives, Appleton, Century, Crofts, New York, 1976.

opportunity to prepare personally to provide terminal, or palliative care, and who have on-going support themselves, provide the best care and support to the child and the family. It is highly desirable to have the same staff assigned to the care of the child for each admission in the terminal phase of an illness.

Hospitals need to plan for support of the family following the death of a child.

## 3. POLICIES AND PROCEDURES

The hospital should develop and make available to all staff involved in child care a policy and procedure manual which is current and which reflects the special care requirements of children receiving ambulatory or inpatient care. The hospital should ensure that all staff involved in the care of children are familiar with its contents.

All hospital policies should be reviewed for their applicability to pediatric patients. Areas which require specific policy statements are described below.

### 3.1 Admission, Bed Assignment and Discharge

The decision to admit a child or adolescent must take into consideration appropriate alternate methods of care. An alternative, such as a home care program, may be more beneficial to the child and the family and could result in cost savings.

Bed Assignment

In order to ensure that each pediatric patient receives the most appropriate care, bed assignments should be made in consultation with the unit staff and should take into account:

- availability of beds;
- availability of nursing staff;
- health problem and level of care. e.g., isolation;
- age and developmental level of the patient;
- anticipated family involvement in care;
- anticipated length of stay;
- cultural background.

Since grouping patients by age more appropriately meets social, emotional and developmental needs of children it is recommended that:

- all younger patients should be located in the pediatric unit except in exceptional circumstances, such as when the child requires intensive care, for example following cardiac surgery or neurosurgery, or where there is hospitalization of more than one family member;

- adolescents be cared for in a special unit or area designed to support their needs. If a separate adolescent unit is not practical, these patients should nonetheless be grouped together. Some general hospitals have found it beneficial to allow older adolescents a choice of locations in the hospital;

- special individualized arrangements be made for older adolescents or young adults falling within special clinical populations e.g. cystic fibrosis, Turner's Syndrome, dwarfism, meningomylocele, and non-operative cardiac conditions. Improved diagnosis and treatment is enabling many patients with these types of chronic conditions to survive into adulthood. It is likely that in the next

two decades their life expectancy will continue to increase. Special arrangements will therefore be required for these patients to cover the transition period between specialized services for children and specialized services for adults.

## Preparation for Admission, Surgery and Other Procedures

Prepared books and pamphlets explaining the hospital/unit should be provided to parents and the child prior to or at the time of admission. Information in the pamphlet should include:

- what to tell the child about the hospital;
- what to bring to the hospital;
- visiting policy;
- overnight accommodations available for parents;
- how to make telephone inquiries;
- hospital facilities and regulations for parking, T.V.'s, telephones, gift shop, smoking policy, food service and support departments.

Hospitals should encourage pre-admission tours of the pediatric unit(s) for children and their families who will be electively admitted. Some hospitals prefer to offer a preparation tour for groups of children who are to be admitted.

Children who will undergo surgery and/or some test or treatment such as catheterization, lumbar puncture or a gastrointestinal series should be psychologically prepared. Various methods can be employed to prepare children of different ages: printed material (brochures); tours (for example Intensive Care) for a child who is to have open heart surgery; books; dolls and puppets; role-playing equipment and clothing; films, slides

and pictures; and one-to-one explanations at the time of the event. The same techniques can be used to "debrief" children following surgery, procedures or emergency admissions.

In order to complete pre-admission documentation and to check on the health of the child, admitting staff should contact the families of all children requiring elective admission prior to their arrival at the hospital.

At Time of Admission

To minimize psychological trauma and possible delay in receiving care that are sometimes experienced when going through admitting procedures, hospitals should consider the possibility of having patients admitted directly to the pediatric unit. Admission information could be obtained by having the admitting department clerk seek the information from the parent on the unit or by having the parent visit the admitting department following admission of their child to the unit. If this approach is not feasible, and the child and parent must visit the admitting department prior to going to the unit, the admitting department staff must be child sensitive. Whatever approach is used, it is essential that provision be made, in admitting routines for children, for all legal aspects to be covered. For example, consent forms must be signed by the authorized parent before he/she leaves the premises.

On arrival at the pediatric unit:

- the child and the parents should be welcomed to the unit by the ward clerk or nurse and escorted to his/her room;

- the nurse should explain the admission procedure to the child and the parent(s);

- the nurse assigned to the child's care should seek information about the child's past, present and potential health problems and the child's usual behaviour and coping patterns by observing and interviewing the child and the parent(s);

- the assessment must include both physical and psychosocial needs;

- the child and the parent(s) should be orientated to the unit/hospital environment, routines and expectations. Orientation should include:

  introduction to roomate(s);
  meal times;
  visiting policy;
  smoking policy;
  telephone policy - specific telephone(s) should be reserved for children's use;
  physical environment - bathrooms, playroom, family room, kitchen;
  planning with parents for their participation in their child's care;
  advising parents and children of avenues available to them for expressing concerns/problems.

In addition to the medical history and orders there must be a current, individualized patient care plan for both inpatient and ambulatory patients that includes both the child and the family. For children with complex or long-term problems, multidisciplinary conferences should be held for the purpose of planning and coordinating care.

Discharge Planning

In addition to the normal hospital discharge policies, particular attention should be paid to the following:

- whenever possible, the physician, nurse or ward clerk should notify the parents, or appropriate agency, of the intention to discharge the child;

- prior to discharge the nurse must ensure that the parents have received, and that they understand, oral/written instructions regarding follow-up care;

- when the plan is for the parents to provide care to their child following discharge home:

  the parents must be thoroughly instructed in the care to be provided and must have the opportunity for supervised practice in hospital;
  appropriate referrals to community services must be completed.

  The nurse responsible for the child's discharge procedures must document:

  the child's condition on discharge, such as the child's health status, and absence of injury;
  to whom the child is discharged.

In normal circumstances, a child should not be released to anyone other than the parents or legal guardian. When the parents or guardian wish to arrange for another individual to collect the child, they should ensure that the person is a responsible individual and should give him/her written permission to take responsibility for the child.

Release Against Advice of Physician

Policies are needed to define responses to a parent wishing to remove their child without the consent of the physician. The policies should cover the following areas:

- notification of the physician in charge;
- investigation of situations where it is deemed hazardous for the child to be released, such as the child's state of health, and suspected cases of child abuse. Appropriate legal assistance may be required in these circumstances to safeguard the child;
- investigation of legal guardianship in cases where it is known there is a custodial battle between the parents;
- investigation of circumstances where a parent wishes to remove the child, but the child wishes to stay.

### 3.2 Appointment System for Ambulatory Care

Appointments for various ambulatory diagnostic services should be coordinated, thereby ensuring that the child is not exposed to lengthy waiting periods between services.

### 3.3 Beds and Cribs

Children should be assigned to a bed or a crib following consultation with the parent(s) to determine the usual practice at home. Generally speaking, unless a child's diagnosis, behaviour level, or practice at home warrants otherwise, children over three years of age should not be placed in cribs.

### 3.4 Child Abuse

Children who are victims of child abuse or neglect[1] may first be identified in emergency units, clinics or hospital units. Therefore,

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1 "Child Abuse and Neglect" encompasses at least physical abuse, sexual abuse (sexual assault and incest), emotional deprivation and nutritional deprivation.

every hospital shall have a known, written, and readily available policy for the identification and treatment of such children, including how the statutory obligations, which exist in all provinces, to report children who may be in need of care and protection to the appropriate child welfare authorities, are to be effected in each hospital.

The policy of the hospital should clearly state at least the following:

- a summary of relevant provincial legislation, including the legal protection afforded to hospital personnel and physicians making reports in good faith;
- the legal (and moral) responsibilities of all hospital employees and medical personnel to identify and report suspected child abuse or neglect;

- the documentation which is required in such cases, including written descriptions of injuries, photographs and x-rays;

- the medical and social investigations which are a) required and b) desirable in such cases;
- the methods to be used in reporting such cases.

Large general hospitals may establish a child abuse team which, in liaison with community agencies, will assume responsibility for:

- making a detailed family assessment;
- providing or recommending appropriate medical and psycho-social treatment;
- being the major liaison between the hospital and child welfare, police, and courts;
- developing a program of continuing education for hospital staff;

- promoting hospital-based and/or community programs to prevent child abuse and neglect (e.g., development of high-risk criteria and providing additional in-home support services);
- promoting hospital-based and/or community programs of treatment for parents (psychiatric care; parent effectiveness programs; support to self-help groups such as 'Parents in Crisis').

Smaller hospitals should identify one or more individuals experienced in this area of work who may assume all or some of these functions in liaison with community agencies.

### 3.5 Communicable Disease Prevention

Because of the frequency with which infections and contagious illness complicate the hospitalization of children, adequate facilities for minimizing the spread of infection must be provided. This is important not only in the inpatient unit but in the ambulatory areas as well. It is especially important in the protection of children who may be immuno-suppressed either by treatment or illness.

A room should be available on the floor for screening admissions if this is not done before the patient arrives at the unit. Rooms in the unit should be constructed so that effective isolation can take place on the floor. These should have separate toilet and washing facilities, a separate sink for staff hand-washing, and separate storage for clean and contaminated linen.

Facilities also may be provided for reverse isolation for protection of immuno-compromised patients.

## 3.6 Consent[1]

The whole subject of consents for children, and especially for adolescents can be problematical. While the parent or guardian can sign consent for medical service to young children, all children capable of understanding should have procedures explained to them and careful consideration given to their expressed wishes with regard to their care.

For adolescents, there is no established age of consent. Age of majority, which varies from province to province, has often been confused with age of consent. The hospital act of the province may identify age and conditions of consent. These acts may be mistakenly considered to override other legal and moral considerations as well. Too often needed medical services are not available to adolescents because of misunderstandings about the issue of consent. Also, at times, adults may be given authority to consent for care of the adolescent without due regard for the wishes of the adolescent.

In the absence of an established age of consent, it is suggested that a minor can contract for health care if the young person is capable of understanding and appreciating the nature and consequences of the health care. The paramount consideration should be the welfare of the minor. It is suggested that even if the guardian is available to sign consent, the adolescent who is a minor should also sign consent for treatment or for release of information.

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1 See also "Proposals for Consent of Minors to Health Care Act." Saskatchewan Law Reform Commission, 1980.

### 3.7 Fire

Evacuation procedures for children in the event of a fire should be outlined.

### 3.8 Medication

For policies applying to medication, see Pharmacy Services page 62.

### 3.9 OR/Anaesthesia

Policies concerning OR and Anaesthesia are covered in the following sections:

Surgical and Anaesthesia Services pages 47-49.
Special Services pages 27-28.

### 3.10 Passes

Children should, whenever feasible, be given passes from the hospital for the purpose of:

- easing the stress of hospitalization and separation by allowing the child to go home or for outings if the health problem and plan of care allows this;

- providing a trial period at home in anticipation of discharge in order to allow the child and parents to adjust to the plan for care at home.

### 3.11 Quality Assurance

In addition to professional practice standards, every hospital should strive to develop a method for the evaluation of the quality of patient services both for inpatient and ambulatory care.

### 3.12 Referral and Follow-up

It is imperative that established patterns for close liaison be maintained with community services. Communication and cooperation with the Department of Health and public health nursing staff is essential. Close cooperation and communication must be maintained with Departments of Social Services (or Children's Aid Societies) especially in the area of child abuse and neglect. Liaison is also necessary with other community organizations such as schools, visiting nurse organizations, mental health clinics and with the family physician.

### 3.13 Release of Information

The consent of the parent (and child depending on level of comprehension) should be obtained before releasing information concerning the condition of the child.

### 3.14 Restraints

Restraints should only be used in exceptional cases where a child's behaviour level makes it necessary for his/her safety. There should be identification of which members of the unit staff can authorize the use of restraints. The reasons for their use should be recorded on the patient's progress notes.

### 3.15 Safety and Accident Prevention

As accidents are the greatest threat to children, particular care must be paid to safety and accident prevention in the hospital setting. Safety features in design are outlined in Section 2.2 and 2.3 of Chapter IV on pages 78 and 79.

### 3.16 Smoking, Alcohol and Non-Medical Use of Drugs

Policies on smoking, drug and alcohol use for patients and visitors should be outlined.

### 3.17 Students

See section on Student Education, page 60.

### 3.18 Transfers

All patients being transferred to another hospital must be accompanied by all pertinent information, including the total plan of care. In order to facilitate a smooth transition for the child to the new environment, it is sometimes necessary to have him/her accompanied by a staff member known to the child where indicated.

### 3.19 Translation

See section on Cultural and Linguistic Services, page 57.

### 3.20 Visiting

Hospitals often have a general visiting policy, stating hours and the number of people who can visit at any one time. However, the following must be taken into account with respect to pediatrics:

- The visiting policy for parents should have no restrictions except where there are medical or legal reasons for limitations. Parents should be encouraged to visit their hospitalized child.

- Siblings should be allowed to visit a hospitalized brother or sister.

- Families should be able to visit as families when possible and not be necessarily bound by a "two people at a time" rule.

- Hospitals may want to require that younger children under a certain age (eg. 12) be accompanied by an adult. It is important that adolescents have reasonable opportunity to visit, as peer contact is so important for this age group.

### 3.21 Volunteers

See Section 20, pages 69 and 70.

## III SERVICES, DEPARTMENTS AND PROGRAMS

In the preamble we have indicated that for some hospitals, the attainment of the services identified is a goal to be worked toward. In the following section a wide range of services, departments and programs, which together promote and assure good pediatric care, are described. In addition, The Guide to Hospital Accreditation[1] should be referred to for further information on many of the services covered.

Each general hospital must determine how it will meet the identified needs of child and adolescent patients, whether by "in-house" staff; by contracts for service, or by consultation with large hospital and/or community services. The determinants for the general hospital will be:

- the volume and complexity of pediatric care required by the community served;
- the presence (or absence) of community health and social service programs;
- the priority attached to the development of pediatric care in the context of total planning for and by the institution;
- the fiscal and/or personnel resources available.

Where it is unlikely that a general hospital could afford and/or recruit specific professional expertise, suggestions have been made as to how hospitals can ensure availability of needed services for child and adolescent patients and their families.

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1 Guide to Hospital Accreditation, 1977 Canadian Council on Hospital Accreditation, Toronto, Ontario.

## 1. Medical and Surgical Services

### 1.1 Head of Service

Each hospital offering child and adolescent services shall designate a Head of Service who will assume responsibility for the standard of pediatric care within the hospital. The Head of Service should preferably hold Fellowship or Certification in Pediatrics of the Royal College of Physicians and Surgeons of Canada or the Professional Corporation of Physicians of Quebec. However, demonstrated interest, skills and concern on the part of any physician would represent a reasonable qualification for such an appointment. In a non-departmentalized hospital a physician should be made responsible for the pediatric service.

The Head of Service shall be given authority by the Medical Staff to make decisions and to act in emergency situations not covered by a written hospital policy for the benefit of the patient.

The Head of Service has the responsibility of developing a list of situations where mandatory consultation is necessary between family practitioners, surgeons and attending staff pediatricians, for example, seriously ill patients, diagnosis in doubt, and malignancies.

The Head of Service shall ensure that there should be a pediatrician on call at all times for every regional referral centre and, when possible, for every emergency department providing pediatric care. Where there is no pediatrician available a plan for pediatric consultation by telephone, or other telecommunications media or transfer to regional or provincial referral centre must exist.

Each Head of Service has a responsibility to ensure that planned teaching programs are offered to all personnel participating in care of children. He/she would also assume responsibility for ensuring that appropriate referral arrangements for care exist.

## 1.2 Medical Services

The medical staff of the pediatric department will vary tremendously from level A Service, in which the only physicians may be family practitioners, to level D Service, in which a full supply of pediatricians, subspecialists and other consulting medical personnel, and interns and residents may be available. The name of the physician directly responsible for the care of their child should be made known to all personnel and parents.

1. Pediatricians - should be certified by the Royal College of Physicians and Surgeons of Canada or the Professional Corporation of Physicians of Quebec. Pediatric subspecialists may have an additional specialty certificate, a certificate of special competence or training and experience.

2. Family Practitioners - spend much time with pediatric patients and will therefore be involved with their care in the pediatric department of the general hospital. In many small communities specialist pediatric services may not be available and the family physician will have to assume this care. When the pediatric unit is run solely by family physicians, arrangements should be made for suitably qualified pediatric consultants from nearby communities to assist and advise in more complex problems beyond the expertise and experience of the available staff.

There should be liaison and involvement of both family physicians and pediatricians at administrative levels to achieve the best possible patient care. Ongoing educational rounds and activities should be encouraged and should involve community and specialist pediatricians.

3. Psychiatrists - Psychiatric service should be available either as an in-hospital service or referral service. In Level D and in some Level C hospitals the services of a child psychiatrist would be available. In all instances some formalized system of consultation with the most appropriately qualified psychiatrist must be set up for both inpatient and ambulatory patients.

4. Subspecialists - Services of specialists in cardiology, neurology, hematology, dermatology, endocrinology, radiation-oncology, gastro-enterology and nephrology may be available in Level D and C hospitals depending on the services offered. In all instances if services are not available they should be on a referral basis.

5. Interns and Residents - Generally an organized teaching program with residents and interns enhances the level of care given to pediatric patients. The services of these physicians are especially valuable in the care of seriously ill patients or those needing intensive care.

## 1.3 Surgical and Anaesthetic Services

Consideration of the range of services to be offered by a hospital should be based on the community demand, demographic considerations and the skilled personnel either available or who can reasonably be recruited.

In general, surgical care to newborns, infants or young children should not be offered unless a Royal College or Corporation certified Surgeon and Anaesthetist with particular training and experience in the care of infants and children are available for the diagnosis, assessment of risk, operation and post operative management. In the absence of such skills the designated surgeon of the hospital responsible for surgery shall have the authority to insist on referral to a centre where such competence exists.

Surgery of infants, newborns and young children requires the immediate 24-hour availability of hematologic, biochemical, radiologic and blood gas determinations. In the absence of such services surgery should not be attempted regardless of the qualifications of the attending physicians. Referral to a unit offering such services should be mandatory (except in the most urgent circumstances).

It is recommended that operations for tumors should only be undertaken where the services of an anatomical pathologist and the facilities for performing frozen sections are available.

Day surgery programs[1] should be developed wherever practicable. Day surgery is a program comprised of pre-admission workup and counselling, performance of procedures and operations in a unit in which patients are admitted and discharged on the same day. Such a service shall have an organized and post operative system whereby home service, both by telephone and visiting is available when needed.

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1. See also Day Surgery Unit, Guidelines for Establishing Special Services in Hospitals, Department of National Health and Welfare, 1982.

## 2. Nursing Services

### 2.1 Background

In a general hospital, care of children and adolescents warrants a different consideration from care of adults because:

- children are grouped in the unit because of age rather than type of health problem or level of care;
- separation from family may mean that the child turns instead to the nursing staff for social, emotional and psychological support;
- developmental and dependency needs of children continue in hospital;
- various aspects of care require more nursing input due to the child's developmental level and the need to involve parents and significant other persons in the care of the child, eg. patient teaching.

### 2.2 Staffing Principles

- Wherever possible in smaller units and without exception in larger units, nursing care of children should be assigned only to nurses experienced in the care of children.
- In order to provide care to children of various ethnic and cultural backgrounds, consideration should be given to drawing at least a portion of the total pediatric nursing staff from these groups.
- Each pediatric unit should function under the leadership of a nurse whose education and experience prepares him/her in clinical and management skills.
- A registered nurse, competent to care for pediatric patients must be present on each shift for each unit.

- Staffing at all times must be adequate to provide supervision and observation. This requires a continuous assessment of the numbers and categories of staff needed.
- Given the same level of care required, the nurse-patient ratio is higher for children than adult care and higher for infants than older children.
- Nurse-patient ratios related to the different shifts are dependent on the level of care required and on the peaks and valleys in care requirements throughout the 24-hour period.
- The Registered Nurse/Qualified Nursing Assistant ratio will vary with the level of care required and on the functions fulfilled by each category of nurse within the particular institution and jurisdiction.
- Clinical Nurse Specialists provide an important resource in the areas of patient care, education and research for patients, families and staff. Hospitals providing care to children having complex and diverse needs should have access to these individuals.

## 2.3 Staff Training

All nursing staff should be selected for qualities that will enable them to work successfully with children and their families.

Registered nurses working with children must be licensed to practise in the appropriate jurisdiction.

Qualified Nursing Assistants should be graduates of approved educational programs and must be licensed to practise in the appropriate jurisdication. They work under the direction of a Registered Nurse and within the confines of their Act.

Clinical Nurse Specialists must have competence gained through education and experience in the clinical specialty of pediatric nursing.

## 2.4 Inpatient Care

The ill child has limited ability to cope in an environment which is foreign to him/her and many patient-care functions are provided by other support departments. By the establishment of a trusting and supportive relationship with an assigned nurse, the stress on the patient and his/her family, created by having to relate to so many different people, can be significantly reduced. Thus continuity of nurse contact is the most important consideration in planning patient assignments for nursing staff.

Nurse staffing must include consideration of:

- age mix of patients on the unit;
- levels of care;
- physical design of the unit;
- system of delivery of nursing care;
- support services to the unit.

The goals for pediatric care can only be realized by providing the appropriate numbers and mix (RN, Qualified N.A., aide) of staff on each shift. The determination of such numbers and mix is a problem for all nursing departments, but particularly so in pediatrics since consideration must include the complexity of health care needs, child dependency and parent involvement.

The solutions to this problem are not obvious and many institutions continue to determine staffing requirements by intuition. While this approach may often be successful, nursing professionals have an increasing responsibility to rationalize staffing needs and to

relate these to the resources available. The old system of determining the nurse-patient ratio is now being replaced by more sophisticated methods of determining workload.

Where nurse staffing is still being determined by using nurse-patient ratios, the following may serve as a general guide:

Intensive Care:

A nurse-patient ratio of 1:1 to 1:2 is a common range.

Infants/children who are acutely ill and whose condition is unstable require constant skilled nursing care and medical management.

Intermediate Care:

A nurse-patient ratio of 1:2 to 1:3 is a common range.

Infants/children who are recovering from the immediate effects of an operation or serious illness, or those who are moderately ill and require diagnostic and treatment procedures or those receiving palliative care require skilled nursing care and observation throughout the 24-hour period. These patients are dependent on nurses and other staff to initiate, supervise and perform most of their activities.

Minimal Care:

A nurse-patient ratio of 1:3 to 1:5 is a common range.

Children whose condition has stabilized and who are convalescing from illness or surgery need infrequent medical and nursing supervision and interventions. This level includes

patients awaiting elective surgery and older children having infrequent diagnostic tests or treatments.

Infants requiring normal newborn care:
A nurse-patient ratio of 1:5 to 1:6 is a common range.

Note:
It is important to remember that nurse-patient ratios cannot be used without consideration being given to levels of care since this influences the numbers and categories of staff required.

### 2.5 Ambulatory Care

All the nursing guidelines defined in 2.1 to 2.3 above have equal application to ambulatory care areas.

In addition, nursing staff involved in the various components that comprise ambulatory care should be knowledgeable and skilled in their respective areas of service. Where appropriate, for example in emergency, this will include competency in resuscitation and life-support measures, knowledge and skill in stabilization for transport and special skill in communication and patient teaching.

The advantages to patient care that result from continuity of care can be fostered by the case method of patient assignment in ambulatory settings.

## 3. Child Life Services

Recent research indicates that stimulation and play are not frivolous matters but actual needs of children. Play and stimulation are critical for optimal development. If children cannot play, either because of too little or too much stimulation

or because of physical limitations or psychological inability (e.g., fear), the consequences may include the following:

- depression, leading to physical and emotional health problems (disturbances in eating, sleeping, body temperature; extreme crying; listlessness; stereotypic behaviour);
- impaired or retarded growth, development and learning, e.g., atrophy of cells and muscles; inhibition of language development; limited cognitive development or
- stress and disorientation leading to physical and emotional health problems.

Recognition of these issues have been alluded to in the preamble. Important changes in the philosophy of caring for children in hospitals have emerged in recent decades, one of which has been the creation and development of Child Life programs.

All hospitals with pediatric units should have Child Life programs.* Child Life programs in health care settings strive to promote optimum development of children, adolescents and families, to maintain normal living patterns and to minimize psychological trauma by providing opportunities for play, learning, self-expression, family involvement and peer contact interaction.

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* The existing names for such programs include the following: Child Life, Children's Activities, Play Therapy, Recreation, Therapeutic Play, Pediatric Play, Activity Therapy, and Child Development. The professional personnel are referred to as: child life specialists, play therapists, play specialists, child life workers, recreation workers, recreational therapists, child life teachers, and volunteers with some training. The Association for the Care of Children's Health, in 1980, decided to refer to such programs as child life programs, and to the professionals as child life specialists. Also see Guidelines for the Development of Child Life Programs and "Child Life Activity Study Section Position paper" - Association for the Care of Children's Health.

These programs should be available to pediatric outpatients as well as inpatients. Although the impact of a hospital encounter for a child in the outpatient department or emergency may be felt to be less than for the child who stays overnight, visits to Emergency can be very stressful, and familiar play materials and activities can help to offset the strange and sudden nature of the encounter. Waits are common in ambulatory care settings, but they do not seem as long when children are playing. Play can be an antidote for both boredom and pain and parents tend to feel more comfortable and less anxious when they see their children playing.

The above observations could be applied to inpatients as well and could be added to the following additional benefits of Child Life programs for inpatients:

- Infants can be exposed to appropriate levels of visual, auditory, tactile and kinaesthetic stimulation.

- Toddlers and preschoolers will find the hospital less strange if they can play with familiar things and play out familiar roles. Supervised play provides a safe outlet for their natural energies and assists the child in working out upsetting experiences through the emotionally safer medium of play.

- School-aged children and adolescents can express their concerns and confusions through talking, playing and creative activities. Play provides these children with a sense of autonomy and independence. Child Life programs provide a setting for children to interact with other children, thereby giving each other much-needed companionship and support - contact with peers is especially part of being an adolescent and part of the way in which adolescents deal with problems and feelings.

Staff

- Child Life staff should form a separate unit and be directly responsible to Administration and, within Administration, to the person most responsible for patient services. Child Life staff should be viewed as integral members of the health care team.

- Child Life staff should have a thorough grasp of child growth and development, child psychology, the significance and techniques of various types of play and creative expression, and the impact of hospitalization and illness on children and their families. This knowledge would usually be acquired at the community college or university level.

- Hospitals should aim to have enough Child Life services to provide basic program coverage for all children, not only during weekdays, but also on weekends, evenings and statutory holidays. If very few staff are available, priority should be given to children under five years of age and other children with special needs.

- In smaller units, where Child Life staff are often not available, it is important to have mechanisms to incorporate play and stimulation into the care of the children.

## 4. Cultural and Linguistic Services

It is incumbent on general hospitals providing care to children to identify the needs that are brought about through geographical, cultural and linguistic factors of the children and their families. Such programs would include:

- interpreter services in order to provide adequate explanation/teaching;
- cultural awareness education for hospital staff;
- consultation with these groups when planning inpatient and outpatient programs.

More and more Canadian hospitals are recognizing the need for services in this area and are employing a variety of means to meet the need. For example, in some parts of the country hospitals providing care for Indian and Inuit people have hired people from these groups to serve as liaison workers.

## 5. Dental Services[1]

Dental services for children should be available to patients attending general hospitals. The principal need is for elective dental procedures under anaesthesia usually performed on a day surgery basis. Such services are required for children with emotional problems, mental retardation, cerebral palsy, hearing impairment, etc., who are usually unable to cooperate within the office setting. Other services include dental consultation with other health professionals based in the hospital, for example dental consultation with a surgeon carrying out facial surgery where dental expertise may be required, and the provision of emergency dental services. These latter services may be developed in cooperation with the local dental profession.

## 6. Dietetic Services

An initial history from parents should include the child's normal routine, including eating patterns, likes and dislikes or allergies to particular foods and normal eating times.

It is also important to learn if the child has any special cultural needs, and staff should discuss with the parents the type and quantity of food that can be brought from the home with respect to the child's condition.

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1 See also Dental Care Units in Hospitals, 1978, prepared by the Working Group on Special Services in Hospitals.

Other factors affecting child and adolescent dietetic services are as follows:

- A diet manual should be available stating nutritional guidelines for each age group and which would include basic and special diets and would follow Canada's Food Guide for all groups.
- All children old enough to express a preference should be offered a menu choice and allowed a reasonable freedom in both the amount and kind of food they wish to eat.
- Verbal consultation and written instructions must be available for children being discharged on special diets.
- Mothers should be encouraged to continue breastfeeding infants who may have to be hospitalized unless the child's condition contra-indicates this.[1]
- Parents and older children should be encouraged to take responsibility for entering amounts and type of food and fluid taken. An intake sheet should be left at the bedside for this purpose.
- Babies should always be held when being bottle fed.
- There should be policies for preparation and storage of formula.

Parents should be encouraged to be with their children at mealtimes. However, if the patient is unable to have his/her meals with parent(s), mealtime should simulate eating with the family. All children who are not confined to bed should be encouraged to eat in the company of other children at a table of a suitable size for the child's age and development. Supervision and assistance must be provided for all pre-adolescents during mealtime. Meals should be appropriate for the child's age and development.

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1 See also Statement on Infant and Child Feeding, WHO, Geneva, Switzerland, October 1979.

## 7. Educational Programs

Continuing Education

All staff should be expected to update their knowledge and skills by attending case conferences, seminars and post-graduate courses where appropriate. Staff should have ready access to library services, reference material and audiovisual aids.

Staff development should also be made available to personnel from other areas of the hospital who are dealing with children and their families. Provision should be made for orientation, inservice education and continuing education programs utilizing appropriate expertise from each discipline as required.

Student Education

Students from the various disciplines such as medicine, nursing and other health professions are often assigned to pediatric units in the hospital. A written plan of agreement or contract should exist between the hospital and the educational institution. Students should be provided with an orientation program and should be supervised by their own instructors or assigned to a member of the hospital staff.

Examination of the child for teaching purposes should be controlled, and patient conferences should not take place at the child's bedside.

## 8. Laboratory Services[1]

Micro methods must be available to laboratories serving a pediatric population. There should be coordination of the collection of specimens to

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1 See also Guidelines for the appropriate use of medical laboratory services in Canada, October 1979, Health Services Directorate, Department of National Health and Welfare.

avoid unnecessary invasion of the child. Technicians collecting specimens should be sensitive to the needs of the child.

## 9. Occupational Therapy Services

Occupational therapy services should be available to all child and adolescent patients as required. Provision should be made for Occupational Therapists to make and properly fit required splints andother aids needed following surgery and/or trauma. Occupational Therapists, working as part of the multidisciplinary team, will assist in making detailed assessments of physical, mental, and perceptual difficulties.

Hospitals that do not have an Occupational Therapist on staff should consider an established referral pattern for children who require this service and should also consider the possibility of sharing this service with others in the region.

## 10. Pastoral Services

The provision of appropriate pastoral services for children and adolescents will best be achieved when it is seen that in many cases the patient is the family and the child and not the child alone. The support given to families and at times to staff members of the Pediatric Unit by the hospital pastoral services often indirectly benefits the child. Children will be comforted by a visit from the family's own minister or pastoral counsellor if they know that person well and he/she is seen as a friend of the family. It should be noted, however, that not all ministers are comfortable in ministering to children. The age level, severity of the illness, and the availability of personnel necessitate quite different approaches to pastoral care to children. Ongoing consultation involving pediatric staff, family members, and the pastoral services of the hospital is desired in order that appropriate pastoral care be available.

In general the CCHA guideline for Pastoral Services contained in the Guide to Hospital Accreditation (1977) would also apply to Pastoral Services for Children. However, the more recent (1978) CCHA Guide to Accreditation of Long-Term Care Centres updates this Guide in that it recognizes new directions in Pastoral Services such as the "lay visitor", and the importance of the role of the clergy in "children's centres".

## 11. Pharmacy Services

The hospital pharmacy committee, with representation from the pediatric medical staff, should determine the items and dosages or strengths of medications to be regularly stocked and available in the pharmacy for the treatment of children.

A current Compendium of Pharmaceutical Specialties and a pediatric pharmacopea should be available. Updated pharmacy bulletins should also be accessible.

Appropriate arrangements should be made for provision of drugs, chemicals, biologicals, and solutions to be available on the unit in appropriate strengths for children.

In addition, there should be written policy on the following and other aspects of pharmaceutical services for children:

- appropriate checking of all drugs;
- aerosol administration;
- identification of personnel responsible for dispensing drugs outside of pharmacy hours;
- pre-op medication doses;
- a formula for calculating divided doses, and for double checking of calculated doses;
- volume of intramuscular injections to be given in single injections according to size of child;
- intravenous drugs - strength and toxicity;
- role of the pharmacist as a resource to the community regarding pediatric medication;

- telephone contact between children's hospital and the regional centre;
- special precautions regarding dosage of narcotics and mixed solutions.

## 12. Physiotherapy Services

Every hospital providing pediatric care should be able to make physiotherapy services available for pre and post-operative treatments, and for rehabilitation following surgery and/or trauma. For long-term conditions, such as neurological or chronic respiratory problems, which may require intermittent periods of hospital care (in-patient or outpatient) the physiotherapist may provide specialized treatments, teach the patient and/or parent procedures for home care, or arrange referral to appropriate services/centres.

In addition to being qualified according to the regulations of the appropriate provincial regulatory bodies or institution, previous training and experience in pediatric physiotherapy is desirable.

## 13. Prosthetic and Orthotic Services

These services may be required by children in hospital and, except in major referral centres, are unlikely to be available within the hospital. Therefore, a mechanism should be established by each hospital for ensuring that these services are made readily available to those children who need them.

## 14. Psychology Services

Psychology services should provide assessment and ongoing treatment services to inpatient and ambulatory patients either within the setting or by an established referral pattern to outside services. Psychology services will be available via mental health services, school systems, and sometimes as part of regional health services, depending on local organization patterns. Level D hospitals will

usually have psychology services either as a specific service or as part of the mental health services.

Psychologists should be clinically trained and have experience in working with children. They should be at the Ph.D. level or work under supervision of a clinically trained Ph.D. psychologist, and where necessary be appropriately registered.

Psychology services must have an established liaison with psychiatric and other medical services for consultation.

### 15. Radiology Services

All radiographs must be performed by a qualified Medical Radiation Technologist.

Technologists performing examinations on children should be knowledgeable in the special needs for child radiography, such as special anatomy, optimum techniques with shortest possible exposures, child handling and restraint methods, proper protective shielding and collimation.

All staff should be sensitive to child and parent anxieties and other special needs. The environment can be enhanced by decorations appropriate for children to attract attention and provide a common basis for discussion.

### 16. Respiratory Technology Services[1]

A qualified respiratory technologist should be able to set up, administer and maintain the service under medical direction.

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1. See also Respiratory Technology Service/Unit Guidelines, 1978, prepared by the Working Group on Special Services in Hospitals.

Respiratory problems are a major cause for admission of children to hospital. It is, therefore, particularly important that the physician responsible for the service and the respiratory technologists understand the special physiological and psychological requirements of children.

The hospital procedure and policy manuals must reflect the special requirements of children. Equipment should include child-sized masks, nebulizers, tracheostomy tubes and other equipment essential to the satisfactory care of children of various ages.

Additional/special instruction must be provided to the nursing staff so that they may recognize problems as they occur, adjust equipment in the absence of the technologist and supervise the replenishment of consumable items such as oxygen or aerosol medications. When 24-hour respiratory technology coverage is not available, other staff should be provided with instruction in procedures required by children on a continual basis.

Respiratory technology service should be available on site and/or on call in levels C and D.

There should be close coordination between the respiratory technology and the physiotherapy departments.

## 17. School Programs

Hospitals with pediatric units have the responsibility of ensuring that schooling is available for all school-aged patients. A number of organizational options can be employed to meet this need, and hospitals should use whichever option best serves the pediatric population taking factors such as usual number of school-aged patients and the average length of stay into consideration. Hospitals cannot presume that the responsibility to ensure continued schooling will be assumed by parents or by the child's regular school because (1)

some parents conclude that their child is not able to do schoolwork because of illness; (2) teachers are often unaware of a child's hospitalization or expected length of stay; and (3) in referral hospitals, the child may be significantly geographically removed from the regular school system.

Organizational Options

Full-time teachers should be employed in situations where there are several school-aged patients in hospital for a week or longer. Children with chronic conditions who may be hospitalized for only a few days, but admitted on a number of occasions, also need schooling available in hospital; their cumulative absence from school can be considerable.

Funding for full-time, hospital-based teachers may come from provincial government grants or from municipal school boards.

Hospitals with large pediatric units should have permanent hospital-based teachers, while smaller hospitals may opt for visiting teachers from the local school board who come into the hospital to tutor.

Small units without full-time teaching staff should develop some type of system for arranging for schoolwork that can be applied as soon as a child is admitted for a prolonged hospital stay (e.g., for certain fractures, burns).

In smaller units, where the need for school programming fluctuates a great deal, there are a number of possibilities:

- encourage parents to take an active part in the child's education;
- invite the child's regular teacher(s) to come into the hospital to help;

- have special volunteers (perhaps ex-teachers) who can be assigned to individuals who need help;

- make arrangements with a local teacher-training institution (if there is one) to have education students tutor children who need help;

- senior high school students could do special volunteer work as "after-school tutors".

Characteristics of Good Hospital-Based School Programs

- A hospital school program should be designed so that all school-aged children can attend. There should be no minimum length-of-stay qualifying time period.

- At least some portion of the school program should operate year-round to provide extra help and tutoring for those children who need remedial work (e.g., children with chronic illnesses who may have missed a lot of school studies).

- Teachers, whether they be employees of the hospital or of a school board, need to be familiar with the dynamics of the pediatric unit(s) and the regular communication channels with other departments.

- If teachers are provided by the local school system, someone in the hospital should be designated as a contact person to be responsible for orientation and to deal with problems or requests that may arise.

- Teachers and the school program need to be flexible. In hospitals schedules change, medical treatments and procedures often must take priority over school and/or play activities, and children's conditions often change quickly.

Teachers should work closely with doctors and nurses and other staff when necessary or appropriate. They should also consult with the child's regular teacher to ensure integration of studies.

## 18. Social Work Services

The educational requirement for a social worker employed in a pediatric area will be according to provincial licensing requirements. In larger departments, or in special programs, graduates of community college social work courses might be used in carrying out specific tasks of a co-ordinating and supportive nature, under the supervision of the social worker with a B.S.W. or M.S.W.

Social work services should be available to all hospitalized children, adolescents, and their families as required. Hospital levels B, C, and D should have hospital-based social workers. Level A hospitals may have a hospital-based social worker or make arrangements with local staff of provincial child welfare departments and/or family service agencies for consultation and referral services.

A professionally trained social worker can provide services and bring expertise to the pediatric department in special areas such as:

- work to reduce conflict where the best interests of child and its family are not compatible. May be required to act as an advocate for the family's needs;
- can assume a major role in child abuse team, including assessment, treatment, liaison, and staff development[1];

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1 See also section Child Abuse pages 37-39.

- interpretation of differing backgrounds, standards and expectations, particularly in regard to parenting, to hospital staff;
- recommendation of and referral to appropriate community resources for children and their families;
- promotion of the development of community resources in response to lacks identified in the pediatric department;
- facilitating adoptions, foster home placements and admission to rehabilitation and long-term care hospitals.

## 19. Speech Pathology and Audiology Services[1]

Each hospital providing pediatric care should establish a mechanism for ensuring that language and speech assessments, parental counselling regarding speech and language, and therapy and audiological services can be provided to children who need them. The speech pathologist may also be providing service to adult patients in the hospital and where several hospitals exist in one geographical area the shared use of one therapist should be explored.

## 20. Volunteer Services

Volunteers can provide supplementary services that extend and support the services of staff on the unit or in ambulatory settings, including the emergency unit. Volunteers are at present being used by hospitals in many programs for carrying out services such as feeding, tutoring and reading to children, as surrogate parent and as escorts. They can also be an understanding and interested friend who can give the child and the parents a feeling of security in a stressful new environment.

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1 See also Clinical Guidelines in Language-Speech Pathology and Audiology, 1980, Health Services Directorate, Department of National Health and Welfare.

The volunteer has a responsibility to follow the policies and procedures of the hospital, to be discreet and careful with information about the children and to be dependable.

The hospital has a responsibility to provide an orientation program that introduces the volunteer to the hospital, to the particular tasks, and to whom he/she is responsible.[1]

Volunteers, like any staff member selected to work with children, should be selected for their knowledge of and experience with children and their ability to work sensitively with the child, the family, and professional staff.

Volunteers should be responsible to an identified person such as a Director of Volunteers or the Head Nurse of the Unit, and should receive daily direction and guidance from a permanent staff member.

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1 General Guidelines on Administering Volunteer Services are available from the Ontario Association Directors of Hospital Volunteer Services, 150 Ferrand Drive, Toronto.

## IV SPACE ALLOCATION, UTILIZATION AND SPECIAL DESIGN FEATURES[1,2]

### 1. AMBULATORY FACILITIES

Ambulatory facilities must be appropriate to the anticipated type and volume of patients and the functional and teaching aspects of the unit.

The following guidelines outline the necessary components for a pediatric ambulatory program:

A Reception/Waiting Area[3]

There may be a large central registration area servicing the whole hospital ambulatory program where all records are filled out and stored.

Space should be large enough to accommodate parents, relatives and siblings who frequently accompany the patient. There should be an area for play suitably equipped to keep waiting children occupied and happy.

Examination Rooms and Consulting Offices

The number of examination rooms and consulting offices needs to be assessed on the proven or estimated volume of patient visits, the teaching

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1. Opinions on design information may be obtained from other sources including: Design Consideration for Special Care Units in Hospitals, Health Facilities Design Division, Health Services Directorate, Health Services and Promotion Branch, Department of National Health and Welfare Canada, 1978.

2. For definitions of net and gross areas please refer to: Floor Area Measurement for Health Facilities, Health Facilities Design Division, Health Services Directorate, Health Services and Promotion Branch, Department of National Health and Welfare, 1978.

3. See Section 1.1 pages 21-23.

function of the department and the number of pediatricians who will be geographically full-time or part-time in hospital. If Well Baby Clinics, multidisciplinary clinics such as Cleft Lip and Palate Clinics and other specialty clinics are considered, then provision of space for these services must be planned for. Rooms must be adequate in size, well lighted and have seating space for at least two people in addition to the patient and the physician.

Treatment Rooms

A treatment room of approximately 18.6 $m^2$ (200 square feet) is required. It should be equipped with a storage cabinet or cupboards with adequate supplies such as lumbar puncture sets, suture sets, intubation equipment, syringes and needles. There should be outlets for oxygen and suction. An overhead adjustable focusing light is required. Wall-mounted x-ray view screens should be built in. There should be a sink in the treatment room and in all examination rooms.

Utility and Janitor Rooms and Other Support Facilities

Small separate utility rooms for clean and soiled supplies and for janitorial cleaning equipment are necessary.

Washrooms

Washrooms should be available for patients and their parents. Washrooms should be accessible by wheelchair and a variety of toilet aids such as potties and potty chairs should be available. Areas for diaper changing should be available. Staff washrooms are also required if they are not available in an area close at hand.

Secretarial

Space for secretaries will be required if the department is to perform an administrative function or if a pediatrician is conducting a practice from this area.

Conference and Classroom

A conference/classroom is required for patient conferences and for students assigned to the ambulatory facility.

## 2. INPATIENT FACILITIES

The needs of children and adolescents differ from those for adults. It is a misconception to presume that because children are smaller than adults they will need less space. In fact, a greater amount of space will be required to accommodate such activities as parent participation in care, nursing care, play with, and between children, and ambulation.

The following factors, specific to pediatric care, will influence space utilization and design features:

- Patient bed and crib assignment is complicated by a need for a combination of beds and cribs that constantly varies; therefore rooms must be large enough to accommodate either beds or cribs.
- The need for visualization of patients by nursing staff is increased in pediatric care.
- Rooms should be large enough to allow ambulation space for the children and areas for parents to remain with the child and to allow for privacy for the family.
- Recreational playroom and school facilities will be required to meet the developmental needs of the different age groupings.
- There is a need for more isolation facilities than in adult wards due to a higher incidence of contagious disease among children and because

of the greater susceptibility of certain pediatric patients to contagious diseases, for example, those taking immuno-suppressive drugs.
- Higher nurse staffing complements and a greater number of trainees result in the need for more space for charting areas, treatment rooms, locker rooms, consultation areas, conference and teaching space.
- Patient-parent education activities require interview and/or parent counselling rooms.
- Strollers, playpens and tricycles are a part of the everyday environment of children and storage space will be needed for this equipment.
- There is a increased need for attention to safety precautions and accident prevention.

The entrance to the hospital and route to the pediatric unit should be designed in such a way that the child has minimal contact with sick or injured adult patients.

The unit immediately adjacent to the pediatric unit should be of such designation as to allow flexibility of teenage admissions to either unit depending upon census need and patients' need.

Whenever possible, services for obstetrics, neonatology and pediatrics should be located in the same general area.

The unit should have reasonable access to outside play areas.

## 2.1 Facilities on the Unit

### Nurse's station

The nurse's station should be located as centrally as possible to reduce problems of travel and surveillance. Adequate space is required for staff and trainees to chart. Reception counters should be low enough for

children to see staff and vice-versa.

Medication room

The Medication Storage and Preparation room should be located near to or in the nurse's station so that it is under supervisory control. Safety precautions are needed on a Pediatric Unit as patients may ingest substances if left unattended. The pharmacy dispensing system will determine the type and size of room. The medication room should have a refrigerator reserved for "drugs" only. There should be enough space for two people and the door should be lockable.

Patient rooms

One and two-bed rooms give optimal flexibility to provide for difference in age, degree of illness, isolation and parent accommodation. Four-bed rooms are of most limited use.

The general facilities must be designed for children. Patient rooms should include space for storage of toys, a display board for children to display cards and drawings, and lockers with adjustable racks to enable children to take care of their own clothes.

Each bed space should be equipped with oxygen and suction outlets, telephone jacks and cable T.V. outlets.

Bedroom doors should be wide enough to accommodate beds, cribs, wheelchairs, special appliances, and special stretchers. Hardware on bathroom doors in rooms used by patients should allow the doors to be unlocked and opened outward in cases of emergencies.

Nourishment facilities

Nourishment facilities should be so located as to allow for supervision and ready availability of between-meal feedings. Space sufficient to hold a day's supply of formula must be provided. The type of storage space for commercially prepared formula should be in accordance with supplier's and public health recommendations. Refrigeration supplied must include standard refrigeration temperature for milk and juices and frozen temperature for ice-cream and popsicles.

- A nutritional centre with a refrigerator, heating element and sink should be part of the unit in order to have fluids and snacks available at all times.
- Mealtime should stimulate eating with the family. Tables suitable for small groups of children, trays, bed-tables, etc. should be available. A dining area on the ward is desirable wherever possible, with tables for parents and children.

Utility and Janitor's rooms

Additional safety features must be included to prevent young ambulant patients from access to harmful solutions or supplies.

Treatment room

Adequate space is required to accommodate the staff and parents necessary to perform procedures, provide comfort and safety to the patient, and to carry out teaching activities.

Additional storage space will be needed for treatment trays. An emergency cart with equipment and supplies in sizes and doses to meet the needs of children of all ages

serviced in the unit should be placed in the most accessible central location.

Multi-purpose room

One or two rooms should be provided to serve as interview rooms for: taking medical history of patient and family; parent counselling; general discussion of child's condition with parents; teaching of parents or explaining discharge instructions.

Head Nurse's Office

There is a need for a Head Nurse's office.

Conference/class rooms

Space is required for orientation and continuing education of staff on the unit; multi-disciplinary patient care conferences; change of shift report; and instruction and informal discussion between students and faculty.

Additional space will be needed to allow students to observe or participate in specified functions, such as charting and medicine preparation, without interfering with the efficiency of the work environment.

Linen space

Adequate space should be made available for supplies to meet the needs of patients of different age ranges. This means linen for different size beds as well as bed attire and patient clothing. Patients should be allowed to wear their own clothing when feasible. Laundry facilities, such as a washer and a dryer, should be considered for laundering children's personal clothing.

Bath, shower and toilet facilities

A toilet and sink in each patient's room is desirable, but it is essential that there be at least one sink in each room. The number of showers and tubs will vary with the number and types of patients. Small children are used to tubs, adolescents often prefer showers. Sinks should be adequate in design and number for staff handwashing. Foot or knee pedal operating mechanisms are preferable. Some toilets and sinks should be lower than those for adults; potties and pottychairs should also be available.

Parents'/Visitors' waiting area

Adequate space should be provided for parents and visitors depending upon size of unit.

Storage space

Adequate storage space for usual pediatric equipment, which will include space for feeding tables/chairs, strollers, playpens, and beds for parents. Also sufficient space is required for the storage of cribs and beds for ready exchange as census needs change.

## 2.2 Physical Design

The entrance to all pediatric areas should be attractive and welcoming. Furnishings should be in appealing colours. Rooms should be clearly labelled with numbers and symbols such as animal/flower motifs. Long corriders should be avoided and all corridors should be equipped with handrails. Sharp edges on furniture should be avoided.

The design should allow for nursing staff to have optimal observation of patients, while

at the same time meeting the privacy needs of patients and parents. Rooms for seriously-ill children or infants should be next to the nurse's station.

Windows should be low enough so that children can see out and should be equipped with safety devices.

Soundproofing of the unit is desirable. The decor should contribute to a home-like environment. Colour and texture of materials should be selected with the following considerations: soft, cheerful colours, able to withstand wear and tear by children and cleaning agents used for infection control. Pictures and signage should be positive. Carpeting should be used wherever feasible. Plants should be a part of the unit, but plants with toxic properties should be avoided.

Lighting needs for children are similar to those of adult units and consideration should be given to lighting for the following needs: general illumination, physician examining light, night light, reading light for each patient.

## 2.3 Safety

Safety features required because of the age of the patients include: thermostatically controlled hot water system (controls for the bath tubs should be on the wall, out of reach of a child); patient-safe electrical systems (switches and plugs for critical equipment and room lighting out of reach of children); security monitoring system (exit doors and fire exits should be equipped with alarm systems).

Patient call systems should be designed for easy use by the pediatric patient.

## 2.4 Location and Design of Play Space

Play spaces for inpatients should be located within or adjacent to pediatric units. Close proximity to the unit and nursing station facilitates communication and easy access to children for members of the health care team. If the play space is part of or close to the unit, then, for young children, it is part of a familiar place in an unfamiliar building and can serve to reduce fear. Experience has shown that playrooms within sight of nursing stations are more likely to be used by children with parents and volunteers at times when a Child Life staff is not present. This may be an important consideration if a Child Life Program is not adequately staffed to cover evenings, weekends and holidays.

Play space in the outpatient clinic should be within sight and hearing of the reception desk. If the play space is in another room, there should be a two-way communication system between the play space and the booking desk; otherwise parents would be reluctant to use it, being afraid of "missing their turn".

The design of play spaces should incorporate doors wide enough and floor space sufficient to accommodate the following: a number of children in beds and wheelchairs as well as ambulatory patients; storage space for play materials and craft supplies; movable furniture so that defined play areas can be created and dismantled as needs arise; space to display children's work; access to water; a two-way communication system with the closest nursing station; windows to hallways.

It is advisable, wherever possible, to have separate play spaces for the following age groupings: infants; toddlers and preschoolers; school-age children, and adolescents. The

activity levels and play styles of children of different ages are quite unique and trying to accommodate all needs simultaneously in one space is almost impossible. If different spaces are not possible, then some scheduling and/or adaptation of the space should be arranged so that the needs of each age group can be met.

Separate space for "school" does exist in some hospitals, whereas others use a multi-purpose room on the unit or the playroom for a defined period of time.

Outdoor play spaces should include the following: shade; variations in terrain and surfaces - e.g. small hills, grass, water, sand and also paved areas for children in wheel-chairs and beds; storage space; access to water and a patient bathroom; two-way communication with the indoors (all pediatric nursing stations and Emergency).

## 2.5 Parental Involvement

Space and design features should allow for a parent to be involved with the child's care over a 24-hour period, with consideration given to the needs of the individual child and parents.

Sleeping space for parents can be provided in a number of different ways such as:

- facility to sleep in patient's room, either by providing a chair bed or cot or in a single room by using a second bed if the room is large enough;
- using a double room and providing a full-size adult bed;
- providing a parents' overnight room on the unit;

- facility design incorporating a bed as part of a window seat. Storage space is provided below and padded cushions on top for seating space.

Additional facilities must also be provided, such as privacy for washing, washrooms and showers, change areas for preparing for bed, and lounge areas for relaxing away from the sick child.

The emotional needs of parents must also be considered. A private room is needed for distressed parents.

## V. EQUIPMENT[1]

The type of equipment should be determined by demonstrated clinical needs and staff competent to provide safe, reliable and efficient operation. The availability of servicing should be a prime consideration when selecting equipment. Equipment should be available in all sizes, from newborn to adult.

### 1. SPECIAL EQUIPMENT FOR CHILD AND ADULT RESUSCITATION AND MONITORING

Resuscitation equipment and drugs are best assembled in wheeled emergency carts or portable ("crash carts") boxes.

General equipment

- defibrillator (cardiac) with pediatric paddles and adult paddles;
- electrocardiograph, portable;
- monitor, cardiac or direct-writing electrocardiograph;
- oxygen supply, portable tank and/or wall with valve -humidified, warmed;
- vacuum, suction, portable and/or wall suction with valve and catch bottle;
- infusion pump.

C.P.R. equipment and supplies

In addition to standard C.P.R. equipment and supplies:

- laryngoscopes (with handle, extra batteries, and bulbs)
  Straight blades no. 0,1 & 2. Curved blades no. 1, 2, 3;
- endotracheal tubes with connections:
  Uncuffed 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5 mm

1. Lists of standard equipment are available in many of the references listed on pages 87, 88.

Cuffed 6.0 mm to 8.0 mm.
Stylets for endotracheal tubes;

- McGill forceps - pediatric and adult;
- airways: No. 000, 00, 1, 2, 3, 4;
- suction catheters sized 6, 8, 10, 12;
- mucus trap;
- tonsil suction tip - adult and pediatric;
- hand resuscitation bags - pediatric and adult;
- infant, pediatric and adult 100% $O_2$ bags;
- anesthesia masks - premature, infant, child and adult;
- full range of syringes and needles, including spinal needles;
- nasogastric tubes, 5 Fr., 8Fr., 10 Fr., and 12 Fr.

Drugs for Resuscitation and Emergency Treatment

Drugs and systemic solutions required for resuscitation and emergency treatment should be readily available and should include:

- Cardiac drugs
- Respiratory drugs
- Anti-convulsant drugs
- Stimulant drugs
- Depressant drugs
- Clotting and anti-clotting agents
- Emetic and anti-emetic drugs
- Ionic solutions

All such drugs and solutions should be available in appropriate strengths for each age group and should be clearly labelled to indicate the strength and the route of administration. Each hospital should have a current authorized list of required pediatric emergency drugs and systemic solutions. The list should be used to check the emergency drug supply on a regular basis.

## 2. PLAY AND SCHOOL EQUIPMENT AND MATERIALS

A yearly budget should be established for the purchase of equipment and materials to carry out a wide variety of activities for a variety of age

groups. Toys, games and equipment should be carefully selected with the principal features being safety, durability and flexibility (serving more than one play purpose). (See Appendix I for basic list).

- Donations of toys should be encouraged but all donations should be very carefully screened to ensure that they meet the hospital's standards of safety and suitability.
- Equipment and material for the outpatient clinic and emergency should be especially durable and washable. Large toys or toys with large pieces are particularly recommended.
- A special supply of toys and equipment should be developed for children in isolation - e.g. toys that can be sterilized without losing their appeal or disintegrating.
- Arrangements should be made with the provincial Departments of Education to have at least one copy of all the regularly-used school texts on hand for patients who do not bring their own books.

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22. Thompson, R.H. and Stanford, G. Child Life in Hospitals. Springfield: Charles C. Thomas, 1981.

Additional information and publication lists are available from:

The Association for the Care of Children's Health
3615 Wisconsin Avenue, N.W.
Washington, D.C. 20016
U.S.A.

This international association seeks to foster and promote the health care of children and families in health care settings by education, interdisciplinary interaction, and research. At present there are seven affiliates in Canada and membership is available to anyone working with children.

The Canadian Institute of Child Health
Suite 803, 410 Laurier Avenue West
Ottawa, Ontario
K1R 716

This national organization has, as one of its programs, information on care of children in hospitals.

## DESCRIPTION OF THE CHILD AND ADOLESCENT POPULATION IN GENERAL HOSPITALS

### Age and sex distribution

The age distribution of the child and adolescent hospital population (0-19 years) is seen in Table I. The 0-4 year age group (those most vulnerable to the psychological sequelae of hospitalization) is the most common age group in hospital. This group comprises 38% of the pediatric hospital population, compared with only 21% of the well child population.

**TABLE I**

AGE DISTRIBUTION OF THE PEDIATRIC HOSPITAL POPULATION IN CANADA, CASES AND DAYS PER SEPARATION, 1978

| Age Group (Years) | Cases | | Days Per Separation |
|---|---|---|---|
| | No. | % | |
| Under 1 | 110 594 | 14.10 | 7.5 |
| 1 - 4 | 189 851 | 24.20 | 5.2 |
| 5 - 14 | 253 749 | 32.35 | 5.2 |
| 15 - 19 | 230 256 | 29.35 | 5.9 |
| 0 - 19 | 784 450 | 100.00 | 5.7 |

The sex distribution of the child and adolescent hospital population is seen in Table II. The sex distribution indicates that males outnumber females in each age group, with the exception of the 15-19 year age group.

**TABLE II**

SEX DISTRIBUTION OF THE PEDIATRIC HOSPITAL POPULATION (0-19 YEARS) IN CANADA, BY CASES, 1978

| Age (Years) | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| | Cases | % | Cases | % | Cases | % |
| Under 1 | 110 594 | 100.0 | 63 872 | 57.8 | 46 722 | 42.2 |
| 1 - 4 | 189 851 | 100.0 | 111 984 | 59.0 | 77 867 | 41.0 |
| 5 - 14 | 253 749 | 100.0 | 139 462 | 55.0 | 114 287 | 45.0 |
| 15 - 19 | 230 256 | 100.0 | 80 932 | 35.1 | 149 324 | 64.9 |
| 0 - 19 | 784 450 | 100.0 | 396 250 | 50.5 | 388 200 | 49.5 |

Source : Statistics Canada, "1978 Hospital Morbidity" (Catalogue 82-206)

## Medical-surgical mix

The medical admissions predominate for both cases and days in the 0-4 age group, with a swing thereafter to the surgical admissions. For all pediatric age groups, surgical cases exceed the medical, but the latter utilize more hospital days than the former.

## Diagnostic and operative profiles

The most common diagnostic groups for the child and adolescent hospital population are shown in Table III. Respiratory diseases followed by accidents, poisonings and violence, diseases of the digestive system, complications of pregnancy, infective and parasitic and diseases of the nervous system account for over three-quarters of the cases.[1]

**TABLE III**

MOST COMMON DIAGNOSTIC GROUPS FOR PEDIATRIC HOSPITAL POPULATION (0-19 YEARS) IN CANADA, 1978

| | Number of Cases | % of Total Cases Separated |
|---|---|---|
| Diseases of the respiratory system | 228 566 | 29.14 |
| Accidents, poisonings, violence* | 116 579 | 14.86 |
| Diseases of the digestive system | 64 941 | 8.28 |
| Complications of pregnancy | 60 995 | 7.78 |
| Infective and parasitic diseases | 59 470 | 7.58 |
| Diseases of the nervous system | 45 689 | 5.82 |
| Other | 208 210 | 26.54 |
| Total | 784 450 | 100.00 |

*Includes supplementary classifications

1 Statistics Canada, "1978 Surgical Procedures and Treatments" (Catalogue 82-208).

The most common operative groups for the child and adolescent inpatient hospital population are seen in Table IV. Otorhinolaryngology, orthopedic, abdominal, urological, plastic and ophthalmological surgery account for 69% of surgical procedures.

**TABLE IV**

MOST COMMON OPERATIVE GROUPS FOR PEDIATRIC INPATIENT HOSPITAL POPULATION IN CANADA, 1978

| | Number of Cases | % of Total Cases Separated |
|---|---|---|
| Otorhinolaryngology | 103 316 | 29.40 |
| Orthopedic surgery | 50 832 | 14.47 |
| Abdominal | 38 818 | 11.05 |
| Urological | 18 056 | 5.14 |
| Plastic | 18 718 | 5.33 |
| Ophthalmology | 11 410 | 3.25 |
| Other | 110 231 | 31.37 |
| Total | 351 381 | 100.00 |

Comparable Canadian statistics for day care surgery are not available.[1] The most common day care procedures performed in British Columbia are otorhinolaryngology, dental, plastic, orthopedic surgery and ophthalmological surgery and they account for nearly 80% of all procedures.

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1 Day care surgery usually refers to a hospital service which allows admission and discharge on the day of surgery, which requires general anaesthesia, and which is reserved for elective operative procedures.

**TABLE V**

INCIDENCE OF PEDIATRIC HOSPITALIZATION
BY AGE GROUP, 1971, 1976 AND 1978 IN CANADA

| ge Group ears) | Cases/1000 Population | | | Days/1000 Population | | |
|---|---|---|---|---|---|---|
| | 1971 | 1976 | 1978 | 1971 | 1976 | 1978 |
| nder 1 | 337.44 | 323.96 | 311.18 | 3 282.05 | 2 547.73 | 2 332.77 |
| 1 - 4 | 162.51 | 146.00 | 136.68 | 1 083.52 | 771.48 | 712.51 |
| 5 - 14 | 78.14 | 66.33 | 64.65 | 455.85 | 339.65 | 336.16 |
| 5 - 19 | 114.86 | 102.62 | 96.71 | 774.91 | 595.89 | 566.41 |
| 0 - 19 | 112.65 | 87.28 | 97.44 | 761.54 | 578.01 | 557.34 |

ources: Populations used for calculation of rates - Statistics Canada, "1971 Census of Canada; Population - Single Years of Age" (Catalogue 92-716) and "1976 Census of Canada; Supplementary Bulletins: Geographic and Demographic; Single Years of Age" (Catalogue 92-832).

Cases (separations) and days of care - Statistics Canada, "Hospital Morbidity 1971", "Hospital Morbidity 1976", and "Hospital Morbidity 1978" (Catalogue 82-206).

## Utilization

The incidence rates(*) of pediatric hospitalization (0-19 years) in Canada, by age group, in the census years 1971, 1976 and 1978 are seen in Table V. The 0-4 age group has the highest rates.

The wide variation of incidence rates in the different provinces is seen in Table VI. The rise in rates between 1950 and 1978 in a number of the provinces is associated with many factors, including the availability of prepaid health insurance, an increase in the number of beds in many areas, the changing

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* The incidence rate of hospitalization, by age group, for residents of a given area (usually school district) is a basic measure of utilization. It is referred to as cases or days per 1000 children resident in the area during one year. The term is commonly used in the description of inpatient hospitalization, but is rarely applied to ambulatory admissions.

**TABLE VI**

INCIDENCE OF PEDIATRIC HOSPITALIZATION* IN CANADA (CASES/1000 PEDIATRIC POPULATION), 1950-1978

| | 1950 | 1966 | 1971 | 1975 | 1978 |
|---|---|---|---|---|---|
| Newfoundland | 57 | 95 | 117 | 122 | 114 |
| Maritimes** | 102 | 101 | 121 | 122 | 118 |
| Quebec | 75 | 91 | 91 | 78 | 69 |
| Ontario | 115 | 108 | 103 | 99 | 94 |
| Prairies*** | 126 | 149 | 161 | 148 | 135 |
| British Columbia | 159 | 130 | 114 | 98 | 99 |
| Canada | - | 111 | 112 | 105 | 97 |

* Data from Statistics Canada
** Prince Edward Island, Nova Scotia, New Brunswick
*** Alberta, Saskatchewan, Manitoba

pattern of practice reflecting in part advances in medical science. Within each province, there will be wide fluctuation in rates, with the urban rates being lower and the rural higher. There has been a steady decline in the incidence rates of pediatric hospitalization in both British Columbia and in Ontario, while other provinces have shown a rise until 1971 and a subsequent decline. This decline seems to be a general trend and probably reflects several factors, including the changing disabilities of childhood, decline in operative procedures such as tonsillectomies and availability of alternative care patterns. The rates in Newfoundland and the Maritimes have not yet declined, perhaps reflecting special geographical circumstances. It is reasonable to assume that the incidence rates in all provinces will gradually decline, perhaps to the level of 70 to 80 cases per 1000 and 400 days per 1000 pediatric population (0-19 years).

**APPENDIX II**

## PLAY AND SCHOOL EQUIPMENT AND MATERIALS

Child Life Program

- Lapboards and adjustable easels for children in wheelchairs and beds
- Building and manipulation toys: blocks; puzzles (simple to complex); stacking and fitting toys; building toys; threading toys
- Arts and crafts supplies: paper (different types), paint, brushes, glue, crayons, fabric, wool, scissors, hobby kits, etc.
- Music materials: record player and records, tape recorder and tapes, rhythm instruments; radios; music boxes
- Games: board games (such as checkers, Scrabble), packs of cards, pingpong, pool, electronic games, darts (velcro), bean bag games
- Books
- Movies and film projector
- Messy materials: sand and water tables, clay, play dough
- Role-playing equipment: dollhouse; wooden stove, sink, refrigerator; dress-up clothes; puppets and dolls; medical equipment and clothing; toy telephone, cash register, dishes, etc.
- Active toys: cars, trucks, riding toys, balls
- Infant toys: rattles, squeeze toys, crib gyms, chewing toys
- Blackboard

- Outdoor Equipment:
  - Sand and water toys
  - Tables, benches
  - Balls
  - Safety swings
  - Low, wide slides
  - Low climbing equipment
  - Riding toys (including tricycles and wagons)
  - Mats, blankets (to spread on ground)
  - Sunhats, sunglasses
  - Strollers, carriages

Note: The budget allocated for equipment and materials must be large enough to (1) allow for the basic equipping of play spaces with large pieces of equipment (e.g. play stove and sink, easels, table and chairs, riding toys); (2) allow for regular replacement of craft supplies (e.g. paper, paint, scissors); and (3) allow for replacement of toys or books that are abused, break, are worn out or are taken home.

**APPENDIX III**

## GUIDELINES FOR POLICIES AND PROCEDURES FOR SPECIAL SERVICES IN HOSPITALS

Guidelines for policies and procedures for special services in hospitals were formulated after a review of provincial, national and international information.

It is hoped that the following outline will serve as a guide for the development of more comprehensive and specific Special Services policies in order to ensure the most effective and efficient delivery of patient care in these units.

### I. ROLE AND OBJECTIVES

A. Role and objectives of service in hospitals

B. Type of patients served:

- by diagnosis and/or severity of illness;
- restriction of service, if any (e.g. terminally-ill patients)

C. Services provided.

### II. ORGANIZATION OF SERVICE

A. Governing Board responsibility.

B. Relationship to Administrator and Medical Staff.

C. Service management.

(i) Specific responsibilities of staff:

- Medical Director;
- other medical staff;
- nursing staff;
- other staff.

(ii) Committee

- membership to be defined by discipline and number;
- terms of reference to be defined;
- provision for consultation with appropriate hospital and medical staff;
- schedules for formal and ad hoc meetings.

## III. POLICIES FOR OPERATION OF SERVICE

1. Admission authority by:
   - Medical Director;
   - assistant and resident physicians;
   - nursing supervisor of service.
2. Admission priorities by:
   - diagnostic category;
   - clinical condition.
3. Routine admission Standing Orders.
4. Emergency admission Standing Orders.
5. Length of stay by diagnosis.
6. Guidelines for transfer based on specific routine and emergency priorities.
7. Guidelines for discharge based on specific routine and emergency priorities.
8. Educational requirements of staff.
9. Provision for continuing education of staff.
10. Establishment and maintenance of appropriate patient records.

11. Emergency delegation of responsibility to medical, nursing and/or other staff.

12. Equipment maintenance and safety.

13. Continuing evaluation of effectiveness of service.

IV. **PROCEDURES**

1. Elective procedures: medical, nursing and other.

2. Emergency alert system procedures.

3. Medical record and statistical procedures.

4. Patient - visitor regulations.

## GUIDELINES FOR SPECIAL SERVICES IN HOSPITALS

The following guidelines have been prepared by the Federal-Provincial Sub-Committee on Special Services in Hospitals. These guidelines were requested by the Federal-Provincial Advisory Committee on Institutional and Medical Care Services, Ottawa. Some of the guidelines are updated versions of guidelines previously published by the Sub-Committee.

Adult Psychiatric Services Provided by General Hospitals
Burn Unit
Cardiovascular Services in Hospitals:
- Ambulatory Electrocardiography Monitoring
- Cardiac Care
- Cardiac Catheterization
- Cardiac Surgery
- Cardiovascular Nuclear Medicine
- Cardiac Pacemaker
- Cardiac Stress Testing
- Echocardiography
- Intermediate Cardiac Care
- Non-Invasive Vascular Laboratories
- Phonocardiography

Child and Adolescent Services in General Hospitals
Child and Adolescent Psychiatric Services Provided by General Hospitals
Computed Tomography
Dental Care Units in Hospitals
Detoxication Unit
Diabetic Day Care Unit
Diagnostic Ultrasound Facilities in Hospitals
Day Surgery Unit
Emergency Units in Hospitals
Geriatric Day Hospitals
Geriatric Unit in a Hospital
Intensive Care Unit
Long Term Adult Institutional Care

Narcotic Addiction Treatment Unit
Nuclear Medicine in Hospitals
Palliative Care Services in Hospitals
Patient Hostel Unit
Perinatal Intensive Care Unit
Regional Renal Failure Program
Rehabilitation Medicine Unit
Respiratory Technology Service/Unit
Spinal Cord Injury Unit
Stroke Services
Total Parenteral Nutrition